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References

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REFERENCES

Arterial & Venous Thromboembolism

1. Perry RJ, Tamborska A, Bhagteshwar S, et al. Cerebral venous thrombosis after COVID-19 vaccination in the UK: a multicentre cohort study: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)01608-1/](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)01608-1/)
2. Marcucci R, Marietta M. Vaccine-induced thrombotic thrombocytopenia: the elusive link between thrombosis and adenovirus-based SARS-CoV-2 vaccines. *Intern Emerg Med*. 2021 Aug;16(5):1113-1119. doi: 10.1007/s11739-021-02793-x. Epub 2021 Jun 30. PMID: 34191218; PMCID: PMC8243058.
3. Andraska EA, Kulkarni R, Chaudhary M, et al. Three cases of acute venous thromboembolism in females after vaccination for coronavirus disease 2019. *J Vasc Surg Venous Lymphat Disord*. 2022 Jan;10(1):14-17. doi: 10.1016/j.jvsv.2021.07.009. Epub 2021 Aug 2. PMID: 34352418; PMCID: PMC8327605.: <https://www.sciencedirect.com/science/article/pii/S2213333X21003929>
4. Tajstra M, Jaroszewicz J, Gąsior M. Acute Coronary Tree Thrombosis After Vaccination for COVID-19. *JACC Cardiovasc Interv*. 2021 May 10;14(9):e103-e104. doi: 10.1016/j.jcin.2021.03.003. PMID: 33958175; PMCID: PMC8092130. <https://www.sciencedirect.com/science/article/abs/pii/S1936879821003988>
5. See I, Su JR, Lale A, et al. US Case Reports of Cerebral Venous Sinus Thrombosis With Thrombocytopenia After Ad26.COVS.2.S Vaccination, March 2 to April 21, 2021. *JAMA*.

- 2021 Jun 22;325(24):2448-2456. doi: 10.1001/jama.2021.7517. PMID: 33929487; PMCID: PMC8087975. <https://pubmed.ncbi.nlm.nih.gov/33929487/>
6. Öcal O, Stecher SS, Wildgruber M. Portal vein thrombosis associated with ChAdOx1 nCov-19 vaccination. *Lancet Gastroenterol Hepatol.* 2021 Aug;6(8):676. doi: 10.1016/S2468-1253(21)00197-7. Epub 2021 Jun 9. PMID: 34115963; PMCID: PMC8186953. [https://www.thelancet.com/journals/langas/article/PIIS2468-1253\(21\)00197-7/](https://www.thelancet.com/journals/langas/article/PIIS2468-1253(21)00197-7/)
 7. Sharifian-Dorche M, Bahmanyar M, Sharifian-Dorche A, et al. Vaccine-induced immune thrombotic thrombocytopenia and cerebral venous sinus thrombosis post COVID-19 vaccination; a systematic review. *J Neurol Sci.* 2021 Sep 15;428:117607. doi: 10.1016/j.jns.2021.117607. Epub 2021 Aug 3. PMID: 34365148; PMCID: PMC8330139. <https://www.sciencedirect.com/science/article/pii/S0022510X21003014>
 8. Gresele P, Marietta M, Ageno W, et al. Management of cerebral and splanchnic vein thrombosis associated with thrombocytopenia in subjects previously vaccinated with Vaxzevria (AstraZeneca): a position statement from the Italian Society for the Study of Haemostasis and Thrombosis (SISST). *Blood Transfus.* 2021 Jul;19(4):281-283. doi: 10.2450/2021.0117-21. Epub 2021 Apr 15. PMID: 33871350; PMCID: PMC8297668. <https://pubmed.ncbi.nlm.nih.gov/33871350/>
 9. Long B, Bridwell R, Gottlieb M. Thrombosis with thrombocytopenia syndrome associated with COVID-19 vaccines. *Am J Emerg Med.* 2021 Nov;49:58-61. doi: 10.1016/j.ajem.2021.05.054. Epub 2021 May 25. PMID: 34062319; PMCID: PMC8143907. <https://www.sciencedirect.com/science/article/abs/pii/S0735675721004381>
 10. Gupta A, Sardar P, Cash ME, et al. Covid-19 vaccine- induced thrombosis and thrombocytopenia-a commentary on an important and practical clinical dilemma. *Prog Cardiovasc Dis.* 2021 Jul-Aug;67:105-107. doi: 10.1016/j.pcad.2021.05.001. Epub 2021 May 18. PMID: 34019911; PMCID: PMC8130591. <https://www.sciencedirect.com/science/article/abs/pii/S0033062021000505>
 11. Cattaneo M. Thrombosis with Thrombocytopenia Syndrome associated with viral vector COVID-19 vaccines. *Eur J Intern Med.* 2021 Jul;89:22-24. doi: 10.1016/j.ejim.2021.05.031. Epub 2021 May 25. PMID: 34092488; PMCID: PMC8148431. <https://www.sciencedirect.com/science/article/abs/pii/S0953620521001904>
 12. Elrashdy F, Tambuwala MM, Hassan SS, et al. Autoimmunity roots of the thrombotic events after COVID-19 vaccination. *Autoimmun Rev.* 2021 Nov;20(11):102941. doi: 10.1016/j.autrev.2021.102941. Epub 2021 Sep 9. PMID: 34508917; PMCID:

- PMC8426137. <https://www.sciencedirect.com/science/article/abs/pii/S1568997221002160>
13. Greinacher A, Thiele T, Warkentin TE, Wet al. Thrombotic Thrombocytopenia after ChAdOx1 nCov-19 Vaccination. *N Engl J Med*. 2021 Jun 3;384(22):2092-2101. doi: 10.1056/NEJMoa2104840. Epub 2021 Apr 9. PMID: 33835769; PMCID: PMC8095372. https://www.nejm.org/doi/full/10.1056/NEJMoa2104840?query=recirc_cu ratedRelated_article
 14. Pomara C, Sessa F, Ciaccio M, et al. Post-mortem findings in vaccine-induced thrombotic thrombocytopenia. *Haematologica*. 2021 Aug 1;106(8):2291-2293. doi: 10.3324/haematol.2021.279075. PMID: 34011138; PMCID: PMC8327725. <https://haematologica.org/article/view/haematol.2021.279075>
 15. Douxfils J, Favresse J, Dogné JM, et al. Hypotheses behind the very rare cases of thrombosis with thrombocytopenia syndrome after SARS-CoV-2 vaccination. *Thromb Res*. 2021 Jul;203:163-171. doi: 10.1016/j.thromres.2021.05.010. Epub 2021 May 15. PMID: 34029848; PMCID: PMC8123522. <https://www.sciencedirect.com/science/article/abs/pii/S0896841121000895>
 16. Douxfils J, Favresse J, Dogné JM, et al. Hypotheses behind the very rare cases of thrombosis with thrombocytopenia syndrome after SARS-CoV-2 vaccination. *Thromb Res*. 2021 Jul;203:163-171. doi: 10.1016/j.thromres.2021.05.010. Epub 2021 May 15. PMID: 34029848; PMCID: PMC8123522. <https://www.sciencedirect.com/science/article/abs/pii/S0049384821003315>
 17. Dias L, Soares-Dos-Reis R, Meira J, et al. Cerebral Venous Thrombosis after BNT162b2 mRNA SARS-CoV-2 vaccine. *J Stroke Cerebrovasc Dis*. 2021 Aug;30(8):105906. doi: 10.1016/j.jstrokecerebrovasdis.2021.105906. Epub 2021 May 25. PMID: 34111775; PMCID: PMC8148614. <https://www.sciencedirect.com/science/article/abs/pii/S1052305721003098>
 18. Melas N. Portal vein thrombosis occurring after the first dose of SARS-CoV-2 mRNA vaccine in a patient with antiphospholipid syndrome". 2021 dec. *Science Direct*. Vol 5. : <https://www.sciencedirect.com/science/article/pii/S2666572721000389>
 19. Clark RT, Johnson L, Billotti J, Fet al. Early Outcomes of Bivalirudin Therapy for Thrombotic Thrombocytopenia and Cerebral Venous Sinus Thrombosis After Ad26.COV2.S Vaccination. *Ann Emerg Med*. 2021 Oct;78(4):511-514. doi: 10.1016/j.annemergmed.2021.04.035. Epub 2021 Jul 3. PMID: 34226070; PMCID: PMC8253724. <https://www.sciencedirect.com/science/article/pii/S0196064421003425>

20. Lee EJ, Lee AI. Cerebral venous sinus thrombosis after vaccination: the UK experience. *Lancet*. 2021 Sep 25;398(10306):1107-1109. doi: 10.1016/S0140-6736(21)01788-8. Epub 2021 Aug 6. PMID: 34370974; PMCID: PMC8346246.: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)01788-8/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)01788-8/fulltext)
21. Schultz NH, Sørvoll IH, Michelsen AE, et al. Thrombosis and Thrombocytopenia after ChAdOx1 nCoV-19 Vaccination. *N Engl J Med*. 2021 Jun 3;384(22):2124-2130. doi: 10.1056/NEJMoa2104882. Epub 2021 Apr 9. PMID: 33835768; PMCID: PMC8112568. https://www.nejm.org/doi/full/10.1056/NEJMoa2104882?query=recirc_curatedRelated_article
22. Dutta A, Ghosh R, Bhattacharya D, et al. Anti-PF4 antibody negative cerebral venous sinus thrombosis without thrombocytopenia following immunization with COVID-19 vaccine in an elderly non-comorbid Indian male, managed with conventional heparin-warfarin based anticoagulation. *Diabetes Metab Syndr*. 2021 Jul-Aug;15(4):102184. doi: 10.1016/j.dsx.2021.06.021. Epub 2021 Jun 24. PMID: 34186376; PMCID: PMC8223002. <https://www.sciencedirect.com/science/article/pii/S1871402121002046>
23. Dalan R, Boehm BO. Thrombosis post COVID-19 vaccinations: Potential link to ACE pathways. *Thromb Res*. 2021 Oct;206:137-138. doi: 10.1016/j.thromres.2021.08.018. Epub 2021 Aug 28. PMID: 34479129; PMCID: PMC8397505. <https://www.sciencedirect.com/science/article/pii/S0049384821004369>
24. Bikdeli B, Chatterjee S, Arora S, et al. Cerebral Venous Sinus Thrombosis in the U.S. Population, After Adenovirus-Based SARS-CoV-2 Vaccination, and After COVID-19. *J Am Coll Cardiol*. 2021 Jul 27;78(4):408-411. doi: 10.1016/j.jacc.2021.06.001. Epub 2021 Jun 8. PMID: 34116145; PMCID: PMC8186447. <https://www.sciencedirect.com/science/article/pii/S0735109721051949>
25. Guan CY, Tsai SH, Fan JS, et al. Middle-age Asian male with cerebral venous thrombosis after COVID-19 AstraZeneca vaccination. *Am J Emerg Med*. 2022 Jan;51:427.e3-427.e4. doi: 10.1016/j.ajem.2021.07.011. Epub 2021 Jul 8. PMID: 34274191; PMCID: PMC8265178. <https://www.sciencedirect.com/science/article/pii/S0735675721005714>
26. Mehta PR, Apap Mangion S, Bengner M, et al. Cerebral venous sinus thrombosis and thrombocytopenia after COVID-19 vaccination - A report of two UK cases. *Brain Behav Immun*. 2021 Jul;95:514-517. doi: 10.1016/j.bbi.2021.04.006. Epub 2021 Apr 20. PMID: 33857630; PMCID: PMC8056834. <https://www.sciencedirect.com/science/article/abs/pii/S088915912100163X>
27. Grupo de trabajo multidisciplinar de FACME sobre el manejo de la trombosis venosa cerebral relacionada con la vacunación frente a COVID-19. Recomendaciones diagnóstico-terapéuticas del grupo de trabajo de expertos de FACME ad-hoc sobre el manejo de la

- trombosis venosa cerebral relacionada con la vacunación frente a COVID-19 [Diagnostic and treatment recommendations from the FACME ad-hoc expert working group on the management of cerebral venous sinus thrombosis associated with COVID-19 vaccination]. *Neurologia*. 2021 Jul-Aug;36(6):451-461. Spanish. doi: 10.1016/j.nrl.2021.05.001. Epub 2021 May 6. PMID: 34049738; PMCID: PMC8101796. <https://www.sciencedirect.com/science/article/pii/S0213485321000839>
28. Wolf ME, Luz B, Niehaus L, et al. Thrombocytopenia and Intracranial Venous Sinus Thrombosis after "COVID-19 Vaccine AstraZeneca" Exposure. *J Clin Med*. 2021 Apr 9;10(8):1599. doi: 10.3390/jcm10081599. PMID: 33918932; PMCID: PMC8069989. <https://pubmed.ncbi.nlm.nih.gov/33918932/>
 29. Smadja DM, Yue QY, Chocron R, et al. Vaccination against COVID-19: insight from arterial and venous thrombosis occurrence using data from VigiBase. *Eur Respir J*. 2021 Jul 1;58(1):2100956. doi: 10.1183/13993003.00956-2021. PMID: 33863748; PMCID: PMC8051185. <https://pubmed.ncbi.nlm.nih.gov/33863748/>
 30. Schulz JB, Berlit P, Diener HC, et al. COVID-19 Vaccine-Associated Cerebral Venous Thrombosis in Germany. *Ann Neurol*. 2021 Oct;90(4):627-639. doi: 10.1002/ana.26172. Epub 2021 Aug 23. PMID: 34288044; PMCID: PMC8427115. <https://onlinelibrary.wiley.com/doi/10.1002/ana.26172>
 31. Fan BE, Shen JY, Lim XR, et al. Cerebral venous thrombosis post BNT162b2 mRNA SARS-CoV-2 vaccination: A black swan event. *Am J Hematol*. 2021 Sep 1;96(9):E357-E361. doi: 10.1002/ajh.26272. Epub 2021 Jun 26. PMID: 34133027; PMCID: PMC8420211. <https://pubmed.ncbi.nlm.nih.gov/34133027/>
 32. Ciccone A, Zanotti B; working group on cerebral venous thrombosis after COVID-19 vaccination. The importance of recognizing cerebral venous thrombosis following anti-COVID-19 vaccination. *Eur J Intern Med*. 2021 Jul;89:115-117. doi: 10.1016/j.ejim.2021.05.006. Epub 2021 May 10. PMID: 34001390; PMCID: PMC8108377. <https://pubmed.ncbi.nlm.nih.gov/34001390/>
 33. Sangli S, Virani A, Cheronis N, et al. Thrombosis With Thrombocytopenia After the Messenger RNA-1273 Vaccine. *Ann Intern Med*. 2021 Oct;174(10):1480-1482. doi: 10.7326/L21-0244. Epub 2021 Jun 29. PMID: 34181446; PMCID: PMC8251935. <https://pubmed.ncbi.nlm.nih.gov/34181446/>
 34. Cari L, Fiore P, Naghavi Alhosseini M, et al. Blood clots and bleeding events following BNT162b2 and ChAdOx1 nCoV-19 vaccine: An analysis of European data. *J Autoimmun*. 2021 Aug;122:102685. doi: 10.1016/j.jaut.2021.102685. Epub 2021 Jun 23. PMID: 34174723; PMCID: PMC8220408. <https://pubmed.ncbi.nlm.nih.gov/34174723/>

35. Long B, Bridwell R, Gottlieb M. Thrombosis with thrombocytopenia syndrome associated with COVID-19 vaccines. *Am J Emerg Med*. 2021 Nov;49:58-61. doi: 10.1016/j.ajem.2021.05.054. Epub 2021 May 25. PMID: 34062319; PMCID: PMC8143907. <https://www.sciencedirect.com/science/article/abs/pii/S0735675721004381>.
36. Dutta A, Ghosh R, Bhattacharya D, et al. Anti-PF4 antibody negative cerebral venous sinus thrombosis without thrombocytopenia following immunization with COVID-19 vaccine in an elderly non-comorbid Indian male, managed with conventional heparin-warfarin based anticoagulation. *Diabetes Metab Syndr*. 2021 Jul-Aug;15(4):102184. doi: 10.1016/j.dsx.2021.06.021. Epub 2021 Jun 24. PMID: 34186376; PMCID: PMC8223002. <https://www.sciencedirect.com/science/article/pii/S1871402121002046>.
37. Cari L, Fiore P, Naghavi Alhosseini M, et al. Blood clots and bleeding events following BNT162b2 and ChAdOx1 nCoV-19 vaccine: An analysis of European data. *J Autoimmun*. 2021 Aug;122:102685. doi: 10.1016/j.jaut.2021.102685. Epub 2021 Jun 23. PMID: 34174723; PMCID: PMC8220408. <https://www.sciencedirect.com/science/article/pii/S0896841121000937>.
38. D'Agostino V, Caranci F, Negro A, et al. A Rare Case of Cerebral Venous Thrombosis and Disseminated Intravascular Coagulation Temporally Associated to the COVID-19 Vaccine Administration. *J Pers Med*. 2021 Apr 8;11(4):285. doi: 10.3390/jpm11040285. PMID: 33917902; PMCID: PMC8068274. <https://pubmed.ncbi.nlm.nih.gov/33917902/>
39. Al-Maqbali JS, Al Rasbi S, Kashoub MS, et al. A 59-Year-Old Woman with Extensive Deep Vein Thrombosis and Pulmonary Thromboembolism 7 Days Following a First Dose of the Pfizer-BioNTech BNT162b2 mRNA COVID-19 Vaccine. *Am J Case Rep*. 2021 Jun 12;22:e932946. doi: 10.12659/AJCR.932946. PMID: 34117206; PMCID: PMC8212841. <https://pubmed.ncbi.nlm.nih.gov/34117206/>
40. Geeraerts T, Montastruc F, Bonneville F, et al. Oxford-AstraZeneca COVID-19 vaccine-induced cerebral venous thrombosis and thrombocytopenia: A missed opportunity for a rapid return of experience. *Anaesth Crit Care Pain Med*. 2021 Aug;40(4):100889. doi: 10.1016/j.accpm.2021.100889. Epub 2021 May 24. PMID: 34033927; PMCID: PMC8141689. <https://pubmed.ncbi.nlm.nih.gov/34033927/>
41. Wang RL, Chiang WF, Shyu HY, et al. COVID-19 vaccine-associated acute cerebral venous thrombosis and pulmonary artery embolism. *QJM*. 2021 Nov 5;114(7):506-507. doi: 10.1093/qjmed/hcab185. PMID: 34247246; PMCID: PMC8344576. <https://pubmed.ncbi.nlm.nih.gov/34247246/>.
42. Barral M, Arrive L, El Mouhadi-Barnier S, et al. Thromboaspiration and fibrinolysis infusion for portomesenteric thrombosis after AstraZeneca COVID-19 vaccine administration.

Intensive Care Med. 2021 Sep;47(9):1034-1036. doi: 10.1007/s00134-021-06458-3. Epub 2021 Jun 16. PMID: 34132839; PMCID: PMC8206184.
<https://pubmed.ncbi.nlm.nih.gov/34132839/>

43. MacIntyre CR, Veness B, Berger D, et al. Thrombosis with Thrombocytopenia Syndrome (TTS) following AstraZeneca ChAdOx1 nCoV-19 (AZD1222) COVID-19 vaccination - A risk-benefit analysis for people < 60 years in Australia. *Vaccine*. 2021 Aug 9;39(34):4784-4787. doi: 10.1016/j.vaccine.2021.07.013. Epub 2021 Jul 10. PMID: 34272095; PMCID: PMC8270740. <https://pubmed.ncbi.nlm.nih.gov/34272095/>
44. Wiedmann M, Skattør T, Stray-Pedersen A, et al. Vaccine Induced Immune Thrombotic Thrombocytopenia Causing a Severe Form of Cerebral Venous Thrombosis With High Fatality Rate: A Case Series. *Front Neurol*. 2021 Jul 30;12:721146. doi: 10.3389/fneur.2021.721146. PMID: 34393988; PMCID: PMC8363077. <https://pubmed.ncbi.nlm.nih.gov/34393988/>.
45. Marchandot B, Carmona A, Trimaille A, et al. Procoagulant microparticles: a possible link between vaccine-induced immune thrombocytopenia (VITT) and cerebral sinus venous thrombosis. *J Thromb Thrombolysis*. 2021 Oct;52(3):689-691. doi: 10.1007/s11239-021-02505-4. Epub 2021 Jun 15. PMID: 34129181; PMCID: PMC8204296. <https://pubmed.ncbi.nlm.nih.gov/34129181/>.
46. Gras-Champel V, Liabeuf S, Baud M, et al. Atypical thrombosis associated with VaxZevria® (AstraZeneca) vaccine: Data from the French Network of Regional Pharmacovigilance Centres. *Therapie*. 2021 Jul-Aug;76(4):369-373. doi: 10.1016/j.therap.2021.05.007. Epub 2021 May 19. PMID: 34083026; PMCID: PMC8165560. <https://pubmed.ncbi.nlm.nih.gov/34083026/>.
47. Wang RL, Chiang WF, Shyu HY, et al. COVID-19 vaccine-associated acute cerebral venous thrombosis and pulmonary artery embolism. *QJM*. 2021 Nov 5;114(7):506-507. doi: 10.1093/qjmed/hcab185. PMID: 34247246; PMCID: PMC8344576. <https://pubmed.ncbi.nlm.nih.gov/34247246/>.
48. Taylor P, Allen L, Shrikrishnapalasuriyar N, et al. Vaccine-induced thrombosis and thrombocytopenia with bilateral adrenal haemorrhage. *Clin Endocrinol (Oxf)*. 2021 Jul 8;10.1111/cen.14548. doi: 10.1111/cen.14548. Epub ahead of print. PMID: 34235757; PMCID: PMC8444929. <https://pubmed.ncbi.nlm.nih.gov/34235757/>.
49. Chen YA, Huang HY, Wu SH, et al. Thrombosis of the palmar digital vein after Oxford-AstraZeneca COVID-19 vaccination. *Int J Dermatol*. 2021 Nov;60(11):e469-e471. doi: 10.1111/ijd.15897. Epub 2021 Sep 2. PMID: 34473841; PMCID: PMC8652811. <https://pubmed.ncbi.nlm.nih.gov/34473841/>.

50. Rameessur R, Saffar N, Czako B, et al. Cutaneous thrombosis associated with skin necrosis following Oxford-AstraZeneca COVID-19 vaccination. *Clin Exp Dermatol*. 2021 Dec;46(8):1610-1612. doi: 10.1111/ced.14819. Epub 2021 Jul 29. PMID: 34189756; PMCID: PMC8444634. <https://pubmed.ncbi.nlm.nih.gov/34189756/>
51. Kow CS, Hasan SS. Cerebral Venous Thrombosis following COVID-19 Vaccination. *J Stroke Cerebrovasc Dis*. 2021 Oct;30(10):105866. doi: 10.1016/j.jstrokecerebrovasdis.2021.105866. Epub 2021 May 10. PMID: 34045111; PMCID: PMC8108371. <https://pubmed.ncbi.nlm.nih.gov/34045111/>.
52. Baldi I, Azzolina D, Francavilla A, et al. Thrombotic Events after COVID-19 Vaccination in the Over-50s: Results from a Population-Based Study in Italy. *Vaccines (Basel)*. 2021 Nov 10;9(11):1307. doi: 10.3390/vaccines9111307. PMID: 34835237; PMCID: PMC8620372. <https://pubmed.ncbi.nlm.nih.gov/34835237/>
53. Mendes-de-Almeida DP, Martins-Gonçalves R, Morato-Santos R, et al. Intracerebral hemorrhage associated with vaccine-induced thrombotic thrombocytopenia following ChAdOx1 nCOVID-19 vaccine in a pregnant woman. *Haematologica*. 2021 Nov 1;106(11):3025-3028. doi: 10.3324/haematol.2021.279407. PMID: 34261297; PMCID: PMC8561298. <https://pubmed.ncbi.nlm.nih.gov/34261297/>
54. Ashrani AA, Crusan DJ, Petterson T, et al. Age- and Sex-Specific Incidence of Cerebral Venous Sinus Thrombosis Associated With Ad26.COV2.S COVID-19 Vaccination. *JAMA Intern Med*. 2022 Jan 1;182(1):80-83. doi: 10.1001/jamainternmed.2021.6352. PMID: 34724036; PMCID: PMC8561428. <https://pubmed.ncbi.nlm.nih.gov/34724036/>.
55. Palaiodimou L, Stefanou MI, Katsanos AH, et al. Cerebral Venous Sinus Thrombosis and Thrombotic Events After Vector-Based COVID-19 Vaccines: A Systematic Review and Meta-analysis. *Neurology*. 2021 Nov 23;97(21):e2136-e2147. doi: 10.1212/WNL.0000000000012896. Epub 2021 Oct 5. PMID: 34610990. <https://pubmed.ncbi.nlm.nih.gov/34610990/>.
56. von Hundelshausen P, Lorenz R, Siess W, et al. Vaccine-Induced Immune Thrombotic Thrombocytopenia (VITT): Targeting Pathomechanisms with Bruton Tyrosine Kinase Inhibitors. *Thromb Haemost*. 2021 Nov;121(11):1395-1399. doi: 10.1055/a-1481-3039. Epub 2021 Apr 13. PMID: 33851389. <https://pubmed.ncbi.nlm.nih.gov/33851389/>
57. Yocum A, Simon EL. Thrombotic Thrombocytopenic Purpura after Ad26.COV2-S Vaccination. *Am J Emerg Med*. 2021 Nov;49:441.e3-441.e4. doi: 10.1016/j.ajem.2021.05.001. Epub 2021 May 4. PMID: 33980419; PMCID: PMC8095021. <https://pubmed.ncbi.nlm.nih.gov/33980419/>
58. Sessa M, Kragholm K, Hviid A, et al. Thromboembolic events in younger women exposed to Pfizer-BioNTech or Moderna COVID-19 vaccines. *Expert Opin Drug Saf*. 2021

- Nov;20(11):1451-1453. doi: 10.1080/14740338.2021.1955101. Epub 2021 Jul 26. PMID: 34264151; PMCID: PMC8330010. <https://pubmed.ncbi.nlm.nih.gov/34264151/>
59. Soltani Hekmat A, Javanmardi K. Possible Risk of Thrombotic Events following Oxford-AstraZeneca COVID-19 Vaccination in Women Receiving Estrogen. *Biomed Res Int.* 2021 Oct 25;2021:7702863. doi: 10.1155/2021/7702863. PMID: 34734086; PMCID: PMC8560237. <https://pubmed.ncbi.nlm.nih.gov/34734086/>
 60. Mungmunpuntipantip R, Wiwanitkit V. Thrombosis After Adenovirus-Vectored COVID-19 Vaccination: A Concern on Underlying Illness. *Clin Appl Thromb Hemost.* 2021 Jan-Dec;27:10760296211060446. doi: 10.1177/10760296211060446. PMID: 34755555; PMCID: PMC8586168. <https://pubmed.ncbi.nlm.nih.gov/34755555/>
 61. von Hundelshausen P, Lorenz R, Siess W, et al. Vaccine-Induced Immune Thrombotic Thrombocytopenia (VITT): Targeting Pathomechanisms with Bruton Tyrosine Kinase Inhibitors. *Thromb Haemost.* 2021 Nov;121(11):1395-1399. doi: 10.1055/a-1481-3039. Epub 2021 Apr 13. PMID: 33851389. <https://pubmed.ncbi.nlm.nih.gov/33851389/>
 62. Yocum A, Simon EL. Thrombotic Thrombocytopenic Purpura after Ad26.COV2-S Vaccination. *Am J Emerg Med.* 2021 Nov;49:441.e3-441.e4. doi: 10.1016/j.ajem.2021.05.001. Epub 2021 May 4. PMID: 33980419; PMCID: PMC8095021. <https://pubmed.ncbi.nlm.nih.gov/33980419/>
 63. Sessa M, Kragholm K, Hviid A, et al. Thromboembolic events in younger women exposed to Pfizer-BioNTech or Moderna COVID-19 vaccines. *Expert Opin Drug Saf.* 2021 Nov;20(11):1451-1453. doi: 10.1080/14740338.2021.1955101. Epub 2021 Jul 26. PMID: 34264151; PMCID: PMC8330010. <https://pubmed.ncbi.nlm.nih.gov/34264151/>
 64. Soltani Hekmat A, Javanmardi K. Possible Risk of Thrombotic Events following Oxford-AstraZeneca COVID-19 Vaccination in Women Receiving Estrogen. *Biomed Res Int.* 2021 Oct 25;2021:7702863. doi: 10.1155/2021/7702863. PMID: 34734086; PMCID: PMC8560237. <https://pubmed.ncbi.nlm.nih.gov/34734086/>
 65. Mungmunpuntipantip R, Wiwanitkit V. Thrombosis After Adenovirus-Vectored COVID-19 Vaccination: A Concern on Underlying Illness. *Clin Appl Thromb Hemost.* 2021 Jan-Dec;27:10760296211060446. doi: 10.1177/10760296211060446. PMID: 34755555; PMCID: PMC8586168. <https://pubmed.ncbi.nlm.nih.gov/34755555/>
 66. Gresele P, Momi S, Marcucci R, et al. Interactions of adenoviruses with platelets and coagulation and the vaccine-induced immune thrombotic thrombocytopenia syndrome. *Haematologica.* 2021 Dec 1;106(12):3034-3045. doi: 10.3324/haematol.2021.279289. PMID: 34407607; PMCID: PMC8634187. <https://pubmed.ncbi.nlm.nih.gov/34407607/>

67. Waqar SHB, Khan AA, Memon S. Thrombotic thrombocytopenic purpura: a new menace after COVID bnt162b2 vaccine. *Int J Hematol.* 2021 Nov;114(5):626-629. doi: 10.1007/s12185-021-03190-y. Epub 2021 Jul 15. PMID: 34264514; PMCID: PMC8280631. <https://pubmed.ncbi.nlm.nih.gov/34264514/>.
68. Hasegawa T, Yazaki Y. Unusual Site of Deep Vein Thrombosis After mRNA Coronavirus Disease-2019 (COVID-19) Vaccination. *Circ J.* 2021 Nov 27. doi: 10.1253/circj.CJ-21-0882. Epub ahead of print. PMID: 34840204. <https://pubmed.ncbi.nlm.nih.gov/34840204/>
69. Gabarin N, Patterson S, Pai M, et al. Venous Thromboembolism and Mild Thrombocytopenia after ChAdOx1 nCoV-19 Vaccination. *Thromb Haemost.* 2021 Dec;121(12):1677-1680. doi: 10.1055/a-1585-6182. Epub 2021 Aug 12. PMID: 34384129; PMCID: PMC8632250. <https://pubmed.ncbi.nlm.nih.gov/34384129/>.
70. Mungmunpuntipantip R, Wiwanitkit V. Thromboses of major arteries and ChAdOx1 nCov-19 vaccination. *Neurol Res Pract.* 2021 Nov 29;3(1):61. doi: 10.1186/s42466-021-00160-x. PMID: 34839830; PMCID: PMC8627790. <https://pubmed.ncbi.nlm.nih.gov/34839830/>
71. Andraska EA, Kulkarni R, Chaudhary M, et al. Three cases of acute venous thromboembolism in females after vaccination for coronavirus disease 2019. *J Vasc Surg Venous Lymphat Disord.* 2022 Jan;10(1):14-17. doi: 10.1016/j.jvsv.2021.07.009. Epub 2021 Aug 2. PMID: 34352418; PMCID: PMC8327605. <https://pubmed.ncbi.nlm.nih.gov/34352418/>
72. Crossette-Thambiah C, Pericleous C, Asmar N, et al. Clinical and biological features of cerebral venous sinus thrombosis following ChAdOx1 nCov-19 vaccination. *J Neurol Neurosurg Psychiatry.* 2021 Sep 29;jnnp-2021-327340. doi: 10.1136/jnnp-2021-327340. Epub ahead of print. PMID: 34588182. <https://jnnp.bmj.com/content/early/2021/09/29/jnnp-2021-327340>.
73. Zur-Wyrozumska K. CAd26.COV2-S vaccination can reveal inherited thrombophilia: a case of massive cerebral venous sinus thrombosis in a young man with normal platelet count. *Pol Arch Intern Med.* 2022 Jan 28;132(1). doi: 10.20452/pamw.16114. Epub 2021 Oct 11. PMID: 34632750. <https://pubmed.ncbi.nlm.nih.gov/34632750/>
74. Ambrosetti M, Pontali E. COVID-19 vaccine-induced thrombosis. *Int J Tuberc Lung Dis.* 2021 Sep 1;25(9):691-692. doi: 10.5588/ijtld.21.0389. PMID: 34802488. <https://pubmed.ncbi.nlm.nih.gov/34802488/>.
75. Ostrowski SR, Søgaaard OS, Tolstrup M, et al. Inflammation and Platelet Activation After COVID-19 Vaccines - Possible Mechanisms Behind Vaccine-Induced Immune Thrombocytopenia and Thrombosis. *Front Immunol.* 2021 Nov 23;12:779453. doi: 10.3389/fimmu.2021.779453. PMID: 34887867; PMCID: PMC8649717. <https://pubmed.ncbi.nlm.nih.gov/34887867/>.

76. Hinton J, Brios a E Gala A, Corbett S. mRNA COVID-19 Vaccine-Related Anaphylactoid Reaction and Coronary Thrombosis. *Mayo Clin Proc.* 2021 Dec;96(12):3182-3183. doi: 10.1016/j.mayocp.2021.10.010. Epub 2021 Oct 22. PMID: 34863404; PMCID: PMC8531274.: <https://pubmed.ncbi.nlm.nih.gov/34863404/>.
77. Geeraerts T, Montastruc F, Bonneville F, et al. Oxford-AstraZeneca COVID-19 vaccine-induced cerebral venous thrombosis and thrombocytopaenia: A missed opportunity for a rapid return of experience. *Anaesth Crit Care Pain Med.* 2021 Aug;40(4):100889. doi: 10.1016/j.accpm.2021.100889. Epub 2021 May 24. PMID: 34033927; PMCID: PMC8141689. <https://www.sciencedirect.com/science/article/pii/S235255682100093X>
78. Anderson A, Seddon M, Shahzad K, et al. Post-COVID-19 vaccination occurrence of splenic infarction due to arterial thrombosis. *BMJ Case Rep.* 2021 Dec 7;14(12):e243846. doi: 10.1136/bcr-2021-243846. PMID: 34876440; PMCID: PMC8655567. <https://pubmed.ncbi.nlm.nih.gov/34876440/>
79. Haakonsen HB, Nystedt A. Deep vein thrombosis more than two weeks after vaccination against COVID-19. *Tidsskr Nor Laegeforen.* 2021 Apr 28;141. English, Norwegian. doi: 10.4045/tidsskr.21.0274. PMID: 33928773. <https://pubmed.ncbi.nlm.nih.gov/33928773/>
80. Braun T, Viard M, Juenemann M, et al. Case Report: Take a Second Look: Covid-19 Vaccination-Related Cerebral Venous Thrombosis and Thrombotic Thrombocytopenia Syndrome. *Front Neurol.* 2021 Nov 22;12:763049. doi: 10.3389/fneur.2021.763049. PMID: 34880826; PMCID: PMC8645635. <https://pubmed.ncbi.nlm.nih.gov/34880826/>
81. Greinacher A, Selleng K, Palankar R, et al. Insights in ChAdOx1 nCoV-19 vaccine-induced immune thrombotic thrombocytopenia. *Blood.* 2021 Dec 2;138(22):2256-2268. doi: 10.1182/blood.2021013231. PMID: 34587242; PMCID: PMC8483989. <https://pubmed.ncbi.nlm.nih.gov/34587242/>
82. van Dijk MMH, Veldman HD, Aarts F, et al. A case of unusual mild clinical presentation of COVID-19 vaccine-induced immune thrombotic thrombocytopenia with splanchnic vein thrombosis. *Ann Hepatol.* 2022 Jan-Feb;27(1):100590. doi: 10.1016/j.aohep.2021.100590. Epub 2021 Nov 27. PMID: 34843991; PMCID: PMC8626153. <https://pubmed.ncbi.nlm.nih.gov/34843991/>
83. Cheng N. Cerebral Venous Sinus Thrombosis After Pfizer-BioNTech COVID-19 (BNT162b2) Vaccination. *J Clin Neurol.* 2021 Oct;17(4):573-575. doi: 10.3988/jcn.2021.17.4.573. PMID: 34595867; PMCID: PMC8490890. <https://pubmed.ncbi.nlm.nih.gov/34595867/>
84. Chang JC, Hawley HB. Vaccine-Associated Thrombocytopenia and Thrombosis: Venous Endotheliopathy Leading to Venous Combined Micro-Macrothrombosis. *Medicina*

- (Kaunas). 2021 Oct 26;57(11):1163. doi: 10.3390/medicina57111163. PMID: 34833382; PMCID: PMC8621006. <https://pubmed.ncbi.nlm.nih.gov/34833382/>
85. Rodríguez-Pardo J, Gilo-Arrojo F, Ruiz-Ares G, et al. Thrombosis and Thrombocytopenia Syndrome Causing Isolated Symptomatic Carotid Occlusion after Covid-19 Vaccine. *Thromb Haemost*. 2022 Feb;122(2):300-303. doi: 10.1055/a-1674-0341. Epub 2021 Oct 20. PMID: 34670287. <https://pubmed.ncbi.nlm.nih.gov/34670287/>
 86. Bhan C, Bheesham N, Shakuntulla F, et al. An unusual presentation of acute deep vein thrombosis after the Moderna COVID-19 vaccine-a case report. *Ann Transl Med*. 2021 Oct;9(20):1605. doi: 10.21037/atm-21-2772. PMID: 34790811; PMCID: PMC8576696. <https://pubmed.ncbi.nlm.nih.gov/34790811/>
 87. Panovska-Stavridis I, Pivkova-Veljanovska A, Trajkova S, et al. A Rare Case of Superior Ophthalmic Vein Thrombosis and Thrombocytopenia Following ChAdOx1 nCoV-19 Vaccine Against SARS-CoV-2. *Mediterr J Hematol Infect Dis*. 2021 Mar 1;13(1):e2021048. doi: 10.4084/MJHID.2021.048. PMID: 34276917; PMCID: PMC8265377. <https://pubmed.ncbi.nlm.nih.gov/34276917/>
 88. Park YS. Thrombosis and severe acute respiratory syndrome coronavirus 2 vaccines: vaccine-induced immune thrombotic thrombocytopenia. *Clin Exp Pediatr*. 2021 Aug;64(8):400-405. doi: 10.3345/cep.2021.00717. Epub 2021 Jun 30. PMID: 34237213; PMCID: PMC8342878. <https://pubmed.ncbi.nlm.nih.gov/34237213/>.
 89. Cliff-Patel N, Moncrieff L, Ziauddin V. Renal Vein Thrombosis and Pulmonary Embolism Secondary to Vaccine-induced Thrombotic Thrombocytopenia (VITT). *Eur J Case Rep Intern Med*. 2021 Jun 30;8(7):002692. doi: 10.12890/2021_002692. PMID: 34268278; PMCID: PMC8276919. <https://pubmed.ncbi.nlm.nih.gov/34268278/>.
 90. Jones M, Boisvert A, Landry J, et al. Limb ischemia and pulmonary artery thrombosis after the ChAdOx1 nCoV-19 (Oxford-AstraZeneca) vaccine: a case of vaccine-induced immune thrombotic thrombocytopenia. *CMAJ*. 2021 Jun 14;193(24):E906-E910. doi: 10.1503/cmaj.210795. Epub 2021 May 14. PMID: 33990339; PMCID: PMC8248449. <https://pubmed.ncbi.nlm.nih.gov/33990339/>.
 91. Hwang J, Lee SB, Lee SW, et al. Comparison of vaccine-induced thrombotic events between ChAdOx1 nCoV-19 and Ad26.COV.2.S vaccines. *J Autoimmun*. 2021 Aug;122:102681. doi: 10.1016/j.jaut.2021.102681. Epub 2021 Jun 15. PMID: 34139631; PMCID: PMC8204660. <https://pubmed.ncbi.nlm.nih.gov/34139631/>.

92. Bayas A, Menacher M, Christ M, et al. Bilateral superior ophthalmic vein thrombosis, ischaemic stroke, and immune thrombocytopenia after ChAdOx1 nCoV-19 vaccination. *Lancet*. 2021 May 1;397(10285):e11. doi: 10.1016/S0140-6736(21)00872-2. Epub 2021 Apr 14. PMID: 33864750; PMCID: PMC8046413. <https://pubmed.ncbi.nlm.nih.gov/33864750/>
93. Furie KL, Cushman M, Elkind MSV, et al. Diagnosis and Management of Cerebral Venous Sinus Thrombosis With Vaccine-Induced Immune Thrombotic Thrombocytopenia. *Stroke*. 2021 Jul;52(7):2478-2482. doi: 10.1161/STROKEAHA.121.035564. Epub 2021 Apr 29. PMID: 33914590. <https://pubmed.ncbi.nlm.nih.gov/33914590/>
94. Morales Varas G, Calle Flores A, Sánchez Casado M. Venous sinus thrombosis following vaccination with ChAdOx1 nCov-19. *Med Intensiva (Engl Ed)*. 2021 Aug 19:S0210-5691(21)00177-7. English, Spanish. doi: 10.1016/j.medin.2021.07.003. Epub ahead of print. PMID: 34420802; PMCID: PMC8376560. <https://pubmed.ncbi.nlm.nih.gov/34420802/>
95. Krzywicka K, Heldner MR, Sánchez van Kammen M, et al. Post-SARS-CoV-2-vaccination cerebral venous sinus thrombosis: an analysis of cases notified to the European Medicines Agency. *Eur J Neurol*. 2021 Nov;28(11):3656-3662. doi: 10.1111/ene.15029. Epub 2021 Aug 4. PMID: 34293217; PMCID: PMC8444640. <https://pubmed.ncbi.nlm.nih.gov/34293217/>
96. Hippisley-Cox J, Patone M, Mei XW, et al. Risk of thrombocytopenia and thromboembolism after covid-19 vaccination and SARS-CoV-2 positive testing: self-controlled case series study. *BMJ*. 2021 Aug 26;374:n1931. doi: 10.1136/bmj.n1931. PMID: 34446426; PMCID: PMC8388189. <https://pubmed.ncbi.nlm.nih.gov/34446426/>
97. Cari L, Fiore P, Naghavi Alhosseini M, et al. Blood clots and bleeding events following BNT162b2 and ChAdOx1 nCoV-19 vaccine: An analysis of European data. *J Autoimmun*. 2021 Aug;122:102685. doi: 10.1016/j.jaut.2021.102685. Epub 2021 Jun 23. PMID: 34174723; PMCID: PMC8220408. <https://pubmed.ncbi.nlm.nih.gov/34174723/>
98. Pottegård A, Lund LC, Karlstad Ø, et al. Arterial events, venous thromboembolism, thrombocytopenia, and bleeding after vaccination with Oxford-AstraZeneca ChAdOx1-S in Denmark and Norway: population based cohort study. *BMJ*. 2021 May 5;373:n1114. doi: 10.1136/bmj.n1114. PMID: 33952445; PMCID: PMC8097496. <https://pubmed.ncbi.nlm.nih.gov/33952445/>
99. Simpson CR, Shi T, Vasileiou E, et al. First-dose ChAdOx1 and BNT162b2 COVID-19 vaccines and thrombocytopenic, thromboembolic and hemorrhagic events in Scotland. *Nat Med*. 2021 Jul;27(7):1290-1297. doi: 10.1038/s41591-021-01408-4. Epub 2021 Jun 9. PMID: 34108714; PMCID: PMC8282499. <https://pubmed.ncbi.nlm.nih.gov/34108714/>

100. Bandapaati S, Bobba H, Navinan MR. Coeliac artery and splenic artery thrombosis complicated with splenic infarction 7 days following the first dose of Oxford vaccination, causal relationship or coincidence? *BMJ Case Rep.* 2021 Jul 14;14(7):e243799. doi: 10.1136/bcr-2021-243799. PMID: 34261633; PMCID: PMC8280896. <https://pubmed.ncbi.nlm.nih.gov/34261633/>.
101. Lin W, Ko CA, Sung YF, et al. Cerebral Venous Sinus Thrombosis, Pulmonary Embolism, and Thrombocytopenia After COVID-19 Vaccination in a Taiwanese Man: A Case Report and Literature Review. *Front Neurol.* 2021 Sep 24;12:738329. doi: 10.3389/fneur.2021.738329. PMID: 34630307; PMCID: PMC8498326. <https://pubmed.ncbi.nlm.nih.gov/34630307/>
102. Jamme M, Mosnino E, Hayon J, et al. Fatal cerebral venous sinus thrombosis after COVID-19 vaccination. *Intensive Care Med.* 2021 Jul;47(7):790-791. doi: 10.1007/s00134-021-06425-y. Epub 2021 May 13. PMID: 33983464; PMCID: PMC8117129. <https://pubmed.ncbi.nlm.nih.gov/33983464/>
103. Elrashdy F, Tambuwala MM, Hassan SS, et al. Autoimmunity roots of the thrombotic events after COVID-19 vaccination. *Autoimmun Rev.* 2021 Nov;20(11):102941. doi: 10.1016/j.autrev.2021.102941. Epub 2021 Sep 9. PMID: 34508917; PMCID: PMC8426137. <https://pubmed.ncbi.nlm.nih.gov/34508917/>.
104. Premkumar M, Bhujade H, Karki T, et al. New Portal Vein Thrombosis in Cirrhosis-is the thrombophilia exacerbated due to Vaccine or COVID-19? *J Clin Exp Hepatol.* 2021 Nov 8. doi: 10.1016/j.jceh.2021.10.149. Epub ahead of print. PMID: 34776709; PMCID: PMC8574119. [https://www.jcehepatology.com/article/S0973-6883\(21\)00545-4/fulltext](https://www.jcehepatology.com/article/S0973-6883(21)00545-4/fulltext).
105. Garnier M, Curado A, Billoir P, et al. Imaging of Oxford/AstraZeneca® COVID-19 vaccine-induced immune thrombotic thrombocytopenia. *Diagn Interv Imaging.* 2021 Oct;102(10):649-650. doi: 10.1016/j.diii.2021.04.005. Epub 2021 Apr 28. PMID: 33962903; PMCID: PMC8080133. <https://pubmed.ncbi.nlm.nih.gov/33962903/>.
106. Yamaguchi Y, Kimihira L, Nagasawa H, et al. Cerebral Venous Sinus Thrombosis After BNT162b2 mRNA COVID-19 Vaccination. *Cureus.* 2021 Oct 14;13(10):e18775. doi: 10.7759/cureus.18775. PMID: 34796065; PMCID: PMC8590453. <https://pubmed.ncbi.nlm.nih.gov/34796065/>.
107. Al-Mayhany T, Saber S, Stubbs MJ, et al. Ischaemic stroke as a presenting feature of ChAdOx1 nCoV-19 vaccine-induced immune thrombotic thrombocytopenia. *J Neurol Neurosurg Psychiatry.* 2021 Nov;92(11):1247-1248. doi: 10.1136/jnnp-2021-326984. Epub 2021 May 25. PMID: 34035134. <https://pubmed.ncbi.nlm.nih.gov/34035134/>
108. Koh JS, Hoe RHM, Yong MH, et al. Hospital-based observational study of neurological disorders in patients recently vaccinated with COVID-19 mRNA vaccines. *J Neurol Sci.*

- 2021 Nov 15;430:120030. doi: 10.1016/j.jns.2021.120030. Epub 2021 Oct 13. PMID: 34688190; PMCID: PMC8511874. <https://pubmed.ncbi.nlm.nih.gov/34688190/>
109. Cleaver J, Ibitoye R, Morrison H, et al. Endovascular treatment for vaccine-induced cerebral venous sinus thrombosis and thrombocytopenia following ChAdOx1 nCoV-19 vaccination: a report of three cases. *J Neurointerv Surg.* 2021 Nov 15;neurintsurg-2021-018238. doi: 10.1136/neurintsurg-2021-018238. Epub ahead of print. PMID: 34782400. <https://pubmed.ncbi.nlm.nih.gov/34782400/>
 110. Cari L, Alhosseini MN, Fiore P, et al. Cardiovascular, neurological, and pulmonary events following vaccination with the BNT162b2, ChAdOx1 nCoV-19, and Ad26.COV2.S vaccines: An analysis of European data. *J Autoimmun.* 2021 Dec;125:102742. doi: 10.1016/j.jaut.2021.102742. Epub 2021 Oct 26. PMID: 34710832; PMCID: PMC8547775. <https://pubmed.ncbi.nlm.nih.gov/34710832/>
 111. Lippi G, Favaloro EJ. Cerebral Venous Thrombosis Developing after COVID-19 Vaccination: VITT, VATT, TTS, and More. *Semin Thromb Hemost.* 2022 Feb;48(1):8-14. doi: 10.1055/s-0041-1736168. Epub 2021 Oct 25. PMID: 34695859. <https://pubmed.ncbi.nlm.nih.gov/34695859/>
 112. Gangat N, Guglielmelli P, Betti S, et al. Cerebral venous thrombosis and myeloproliferative neoplasms: A three-center study of 74 consecutive cases. *Am J Hematol.* 2021 Dec 1;96(12):1580-1586. doi: 10.1002/ajh.26336. Epub 2021 Sep 10. PMID: 34453762. <https://pubmed.ncbi.nlm.nih.gov/34453762/>.
 113. Lioudaki S, Kontopodis N, Pontikoglou C, et al. Multiple Sites of Arterial Thrombosis in A 35-Year Old Patient after ChAdOx1 (AstraZeneca) Vaccination, Requiring Emergent Femoral and Carotid Surgical Thrombectomy. *Ann Vasc Surg.* 2022 Feb;79:438.e1-438.e4. doi: 10.1016/j.avsg.2021.07.033. Epub 2021 Oct 10. PMID: 34644642. <https://pubmed.ncbi.nlm.nih.gov/34644642/>
 114. Watts I, Smith D, Mounter S, et al. A case series of vaccine-induced thrombotic thrombocytopenia in a London teaching hospital. *Br J Clin Pharmacol.* 2021 Oct 25;10.1111/bcp.15116. doi: 10.1111/bcp.15116. Epub ahead of print. PMID: 34694650; PMCID: PMC8652623. <https://pubmed.ncbi.nlm.nih.gov/34694650/>
 115. Kuzumi A, Yoshizaki A, Chiba K, et al. Genital necrosis with cutaneous thrombosis after COVID-19 mRNA vaccination. *J Eur Acad Dermatol Venereol.* 2021 Nov 28. doi: 10.1111/jdv.17837. Epub ahead of print. PMID: 34839563. <https://pubmed.ncbi.nlm.nih.gov/34839563/>

116. Yagi Y, Asami Y, Kyoya M, et al. Cerebral venous sinus thrombosis after mRNA-based COVID-19 vaccination. *Neurol Sci.* 2022 Jan;43(1):41-43. doi: 10.1007/s10072-021-05714-0. Epub 2021 Nov 16. PMID: 34783932; PMCID: PMC8593397. <https://pubmed.ncbi.nlm.nih.gov/34783932/>.
117. Thachil J. COVID-19 Vaccine-Induced Immune Thrombosis with Thrombocytopenia (VITT) and the Shades of Grey in Thrombus Formation. *Semin Thromb Hemost.* 2022 Feb;48(1):15-18. doi: 10.1055/s-0041-1735453. Epub 2021 Oct 8. PMID: 34624910. <https://pubmed.ncbi.nlm.nih.gov/34624910/>

Hemorrhage

118. Bjørnstad-Tuveng TH, Rudjord A, Anker P. Fatal cerebral haemorrhage after COVID-19 vaccine. *Tidsskr Nor Laegeforen.* 2021 Apr 29;141. English, Norwegian. doi: 10.4045/tidsskr.21.0312. PMID: 33928772. <https://pubmed.ncbi.nlm.nih.gov/33928772/>
119. Bjørnstad-Tuveng TH, Rudjord A, Anker P. Fatal cerebral haemorrhage after COVID-19 vaccine. *Tidsskr Nor Laegeforen.* 2021 Apr 29;141. English, Norwegian. doi: 10.4045/tidsskr.21.0312. PMID: 33928772. <https://pubmed.ncbi.nlm.nih.gov/33928772/>
120. Finsterer J, Korn M. Aphasia seven days after second dose of an mRNA-based SARS-CoV-2 vaccine. *Brain Hemorrhages.* 2021 Dec;2(4):165-167. doi: 10.1016/j.hest.2021.06.001. Epub 2021 Jun 24. PMID: 34192245; PMCID: PMC8223021. <https://www.sciencedirect.com/science/article/pii/S2589238X21000292#f0005>
121. Simpson CR, Shi T, Vasileiou E, et al. First-dose ChAdOx1 and BNT162b2 COVID-19 vaccines and thrombocytopenic, thromboembolic and hemorrhagic events in Scotland. *Nat Med.* 2021 Jul;27(7):1290-1297. doi: 10.1038/s41591-021-01408-4. Epub 2021 Jun 9. PMID: 34108714; PMCID: PMC8282499. <https://www.nature.com/articles/s41591-021-01408-4>
122. Choi JK, Kim S, Kim SR, et al. Intracerebral Hemorrhage due to Thrombosis with Thrombocytopenia Syndrome after Vaccination against COVID-19: the First Fatal Case in Korea. *J Korean Med Sci.* 2021 Aug 9;36(31):e223. doi: 10.3346/jkms.2021.36.e223. PMID: 34402235; PMCID: PMC8352786. <https://pubmed.ncbi.nlm.nih.gov/34402235/>
123. Sánchez van Kammen M, Aguiar de Sousa D, Poli S, et al. Characteristics and Outcomes of Patients With Cerebral Venous Sinus Thrombosis in SARS-CoV-2 Vaccine-Induced Immune Thrombotic Thrombocytopenia. *JAMA Neurol.* 2021 Nov 1;78(11):1314-1323. doi: 10.1001/jamaneurol.2021.3619. PMID: 34581763; PMCID: PMC8479648. <https://jamanetwork.com/journals/jamaneurology/fullarticle/2784622>

124. Saleh A, Collins J. Case study of thrombosis and thrombocytopenia syndrome following administration of the AstraZeneca COVID-19 vaccine. *Aust J Gen Pract.* 2021 Nov 12;50. PMID: 34781321. <https://pubmed.ncbi.nlm.nih.gov/34781321/>
125. Long B, Bridwell R, Gottlieb M. Thrombosis with thrombocytopenia syndrome associated with COVID-19 vaccines. *Am J Emerg Med.* 2021 Nov;49:58-61. doi: 10.1016/j.ajem.2021.05.054. Epub 2021 May 25. PMID: 34062319; PMCID: PMC8143907. <https://pubmed.ncbi.nlm.nih.gov/34062319/>
126. Maramattom BV, Moidu FM, Varikkottil S, et al. Cerebral venous sinus thrombosis after ChAdOx1 vaccination: the first case of definite thrombosis with thrombocytopenia syndrome from India. *BMJ Case Rep.* 2021 Oct 27;14(10):e246455. doi: 10.1136/bcr-2021-246455. PMID: 34706921; PMCID: PMC8552183. <https://pubmed.ncbi.nlm.nih.gov/34706921/>
127. Hafeez MU, Ikram M, Shafiq Z, et al. COVID-19 Vaccine-Associated Thrombosis With Thrombocytopenia Syndrome (TTS): A Systematic Review and Post Hoc Analysis. *Clin Appl Thromb Hemost.* 2021 Jan-Dec;27:10760296211048815. doi: 10.1177/10760296211048815. PMID: 34698582; PMCID: PMC8552386. <https://pubmed.ncbi.nlm.nih.gov/34698582/>.
128. Kemper M, Lenz G, Mesters RM. Successful Treatment of Vaccine-Induced Immune Thrombotic Thrombocytopenia in a 26-Year-Old Female Patient. *Acta Haematol.* 2021 Oct 6:1-4. doi: 10.1159/000519451. Epub ahead of print. PMID: 34614491; PMCID: PMC8678222. <https://pubmed.ncbi.nlm.nih.gov/34614491/>
129. Su PH, Yu YC, Chen WH, et al. Case Report: Vaccine-Induced Immune Thrombotic Thrombocytopenia in a Pancreatic Cancer Patient After Vaccination With Messenger RNA-1273. *Front Med (Lausanne).* 2021 Nov 1;8:772424. doi: 10.3389/fmed.2021.772424. PMID: 34790684; PMCID: PMC8591100. <https://pubmed.ncbi.nlm.nih.gov/34790684/>
130. Lorente E. Idiopathic Ipsilateral External Jugular Vein Thrombophlebitis After Coronavirus Disease (COVID-19) Vaccination. *AJR Am J Roentgenol.* 2021 Sep;217(3):767. doi: 10.2214/AJR.21.25708. Epub 2021 Jul 22. PMID: 33624509. <https://pubmed.ncbi.nlm.nih.gov/33624509/>.
131. Mustafa Z, Burster T. Comments on Thrombosis After Vaccination: The Leader Sequence of the Spike Protein Might Be Responsible for Thrombosis and Antibody-Mediated Thrombocytopenia. *Viral Immunol.* 2021 Dec;34(10):669-672. doi: 10.1089/vim.2021.0118. Epub 2021 Nov 16. PMID: 34788138. <https://pubmed.ncbi.nlm.nih.gov/34788138>

132. Turi MC, Spitaleri F, Gori AM, et al. A case of vaccine-induced immune thrombotic thrombocytopenia with massive artero-venous thrombosis. *Blood Transfus.* 2021 Jul;19(4):343-346. doi: 10.2450/2021.0131-21. Epub 2021 May 21. PMID: 34059191; PMCID: PMC8297676. <https://pubmed.ncbi.nlm.nih.gov/34059191/>
133. Ramessur R, Saffar N, Czako B, et al. Cutaneous thrombosis associated with skin necrosis following Oxford-AstraZeneca COVID-19 vaccination. *Clin Exp Dermatol.* 2021 Dec;46(8):1610-1612. doi: 10.1111/ced.14819. Epub 2021 Jul 29. PMID: 34189756; PMCID: PMC8444634. <https://pubmed.ncbi.nlm.nih.gov/34189756/>
134. Blauenfeldt RA, Kristensen SR, Ernstsén SL, et al. Thrombocytopenia with acute ischemic stroke and bleeding in a patient newly vaccinated with an adenoviral vector-based COVID-19 vaccine. *J Thromb Haemost.* 2021 Jul;19(7):1771-1775. doi: 10.1111/jth.15347. Epub 2021 May 5. PMID: 33877737; PMCID: PMC8250306. <https://pubmed.ncbi.nlm.nih.gov/33877737/>
135. Huh K, Na Y, Kim YE, et al. Predicted and Observed Incidence of Thromboembolic Events among Koreans Vaccinated with ChAdOx1 nCoV-19 Vaccine. *J Korean Med Sci.* 2021 Jul 12;36(27):e197. doi: 10.3346/jkms.2021.36.e197. PMID: 34254476; PMCID: PMC8275463. <https://pubmed.ncbi.nlm.nih.gov/34254476/>
136. Simpson CR, Shi T, Vasileiou E, et al. First-dose ChAdOx1 and BNT162b2 COVID-19 vaccines and thrombocytopenic, thromboembolic and hemorrhagic events in Scotland. *Nat Med.* 2021 Jul;27(7):1290-1297. doi: 10.1038/s41591-021-01408-4. Epub 2021 Jun 9. PMID: 34108714; PMCID: PMC8282499. <https://pubmed.ncbi.nlm.nih.gov/34108714/>
137. Uaprasert N, Panrong K, Tungjitviboonkun S, et al. ChAdOx1 nCoV-19 vaccine-associated thrombocytopenia: three cases of immune thrombocytopenia after 107 720 doses of ChAdOx1 vaccination in Thailand. *Blood Coagul Fibrinolysis.* 2022 Jan 1;33(1):67-70. doi: 10.1097/MBC.0000000000001082. PMID: 34483267. <https://pubmed.ncbi.nlm.nih.gov/34483267/>.
138. Malik B, Kalantary A, Rikabi K, et al. Pulmonary embolism, transient ischaemic attack and thrombocytopenia after the Johnson & Johnson COVID-19 vaccine. *BMJ Case Rep.* 2021 Jul 14;14(7):e243975. doi: 10.1136/bcr-2021-243975. PMID: 34261635; PMCID: PMC8280905. <https://pubmed.ncbi.nlm.nih.gov/34261635/>
139. Gessler F, Schmitz AK, Dubinski D, et al. Neurosurgical Considerations Regarding Decompressive Craniectomy for Intracerebral Hemorrhage after SARS-CoV-2-Vaccination in Vaccine Induced Thrombotic Thrombocytopenia-VITT. *J Clin Med.* 2021 Jun 24;10(13):2777. doi: 10.3390/jcm10132777. PMID: 34202817; PMCID: PMC8269113. <https://pubmed.ncbi.nlm.nih.gov/34202817/>

140. de Mélo Silva ML Jr, Lopes DP. Large hemorrhagic stroke after ChAdOx1 nCoV-19 vaccination: A case report. *Acta Neurol Scand*. 2021 Dec;144(6):717-718. doi: 10.1111/ane.13505. Epub 2021 Jul 17. PMID: 34273119; PMCID: PMC8444739. <https://pubmed.ncbi.nlm.nih.gov/34273119/>
141. Bjørnstad-Tuveng TH, Rudjord A, Anker P. Fatal cerebral haemorrhage after COVID-19 vaccine. *Tidsskr Nor Laegeforen*. 2021 Apr 29;141. English, Norwegian. doi: 10.4045/tidsskr.21.0312. PMID: 33928772. <https://haematologica.org/article/view/haematol.2021.279075>
142. Okada Y, Sakai R, Sato-Fitoussi M, et al. Potential Triggers for Thrombocytopenia and/or Hemorrhage by the BNT162b2 Vaccine, Pfizer-BioNTech. *Front Med (Lausanne)*. 2021 Sep 30;8:751598. doi: 10.3389/fmed.2021.751598. PMID: 34660652; PMCID: PMC8514746. <https://pubmed.ncbi.nlm.nih.gov/34660652/>.

Myocarditis / Pericarditis

143. Tinoco M, Leite S, Faria B, Cardoso S, et al. Perimyocarditis Following COVID-19 Vaccination. *Clin Med Insights Cardiol*. 2021 Nov 24;15:11795468211056634. doi: 10.1177/11795468211056634. PMID: 34866957; PMCID: PMC8637777. <https://www.ncbi.nlm.nih.gov/pubmed/34866957>
144. Truong DT, Dionne A, Muniz JC, et al. Clinically Suspected Myocarditis Temporally Related to COVID-19 Vaccination in Adolescents and Young Adults: Suspected Myocarditis After COVID-19 Vaccination. *Circulation*. 2022 Feb;145(5):345-356. doi: 10.1161/CIRCULATIONAHA.121.056583. Epub 2021 Dec 6. PMID: 34865500. <https://www.ncbi.nlm.nih.gov/pubmed/34865500>
145. King WW, Petersen MR, Matar RM, et al. Myocarditis following mRNA vaccination against SARS-CoV-2, a case series. *Am Heart J Plus*. 2021 Aug;8:100042. doi: 10.1016/j.ahjo.2021.100042. Epub 2021 Aug 9. PMID: 34396358; PMCID: PMC8349733. <https://www.sciencedirect.com/science/article/pii/S2666602221000409>
146. Montgomery J, Ryan M, Engler R, et al. Myocarditis Following Immunization With mRNA COVID-19 Vaccines in Members of the US Military. *JAMA Cardiol*. 2021 Oct 1;6(10):1202-1206. doi: 10.1001/jamacardio.2021.2833. PMID: 34185045; PMCID: PMC8243257. <https://jamanetwork.com/journals/jamacardiology/fullarticle/2781601>
147. Dionne A, Sperotto F, Chamberlain S, et al. Association of Myocarditis With BNT162b2 Messenger RNA COVID-19 Vaccine in a Case Series of Children. *JAMA Cardiol*. 2021 Dec 1;6(12):1446-1450. doi: 10.1001/jamacardio.2021.3471. PMID: 34374740; PMCID: PMC8356143. <https://pubmed.ncbi.nlm.nih.gov/34374740/>

148. Marshall M, Ferguson ID, Lewis P, et al. Symptomatic Acute Myocarditis in 7 Adolescents After Pfizer-BioNTech COVID-19 Vaccination. *Pediatrics*. 2021 Sep;148(3):e2021052478. doi: 10.1542/peds.2021-052478. Epub 2021 Jun 4. PMID: 34088762. <https://pediatrics.aappublications.org/content/early/2021/06/04/peds.2021-052478>
149. Luk A, Clarke B, Dahdah N, et al. Myocarditis and Pericarditis After COVID-19 mRNA Vaccination: Practical Considerations for Care Providers. *Can J Cardiol*. 2021 Oct;37(10):1629-1634. doi: 10.1016/j.cjca.2021.08.001. Epub 2021 Aug 8. PMID: 34375696; PMCID: PMC8349442. <https://www.sciencedirect.com/science/article/pii/S0828282X21006243>
150. Pepe S, Gregory AT, Denniss AR. Myocarditis, Pericarditis and Cardiomyopathy After COVID-19 Vaccination. *Heart Lung Circ*. 2021 Oct;30(10):1425-1429. doi: 10.1016/j.hlc.2021.07.011. Epub 2021 Jul 31. PMID: 34340927; PMCID: PMC8324414. <https://www.sciencedirect.com/science/article/pii/S1443950621011562>
151. Bozkurt B, Kamat I, Hotez PJ. Myocarditis With COVID-19 mRNA Vaccines. *Circulation*. 2021 Aug 10;144(6):471-484. doi: 10.1161/CIRCULATIONAHA.121.056135. Epub 2021 Jul 20. PMID: 34281357; PMCID: PMC8340726. <https://www.ahajournals.org/doi/pdf/10.1161/CIRCULATIONAHA.121.056135>
152. Diaz GA, Parsons GT, Gering SK, et al. Myocarditis and Pericarditis After Vaccination for COVID-19. *JAMA*. 2021 Sep 28;326(12):1210-1212. doi: 10.1001/jama.2021.13443. PMID: 34347001; PMCID: PMC8340007. <https://jamanetwork.com/journals/jama/fullarticle/2782900>
153. Rosner CM, Genovese L, Tehrani BN, et al. Myocarditis Temporally Associated With COVID-19 Vaccination. *Circulation*. 2021 Aug 10;144(6):502-505. doi: 10.1161/CIRCULATIONAHA.121.055891. Epub 2021 Jun 16. PMID: 34133885; PMCID: PMC8340723. <https://www.ahajournals.org/doi/pdf/10.1161/CIRCULATIONAHA.121.055891>
154. Jain SS, Steele JM, Fonseca B, et al. COVID-19 Vaccination-Associated Myocarditis in Adolescents. *Pediatrics*. 2021 Nov;148(5):e2021053427. doi: 10.1542/peds.2021-053427. Epub 2021 Aug 13. PMID: 34389692. <https://pediatrics.aappublications.org/content/pediatrics/early/2021/08/12/peds.2021-053427.full.pdf>
155. Bautista García J, Peña Ortega P, Bonilla Fernández JA, et al. Acute myocarditis after administration of the BNT162b2 vaccine against COVID-19. *Rev Esp Cardiol (Engl Ed)*. 2021 Sep;74(9):812-814. doi: 10.1016/j.rec.2021.04.005. Epub 2021 Apr 27. PMID: 33994339; PMCID: PMC8075838. <https://pubmed.ncbi.nlm.nih.gov/33994339/>

156. Sulemankhil I, Abdelrahman M, Negi SI. Temporal association between the COVID-19 Ad26.COV2.S vaccine and acute myocarditis: A case report and literature review. *Cardiovasc Revasc Med*. 2021 Aug 16;S1553-8389(21)00578-9. doi: 10.1016/j.carrev.2021.08.012. Epub ahead of print. PMID: 34420869; PMCID: PMC8364889. <https://www.sciencedirect.com/science/article/pii/S1553838921005789>
157. Nassar M, Nso N, Gonzalez C, et al. COVID-19 vaccine-induced myocarditis: Case report with literature review. *Diabetes Metab Syndr*. 2021 Sep-Oct;15(5):102205. doi: 10.1016/j.dsx.2021.102205. Epub 2021 Jul 10. Erratum in: *Diabetes Metab Syndr*. 2021 Sep-Oct;15(5):102277. PMID: 34293552; PMCID: PMC8270733. <https://www.sciencedirect.com/science/article/pii/S1871402121002253>
158. Shaw KE, Cavalcante JL, Han BK, et al. Possible Association Between COVID-19 Vaccine and Myocarditis: Clinical and CMR Findings. *JACC Cardiovasc Imaging*. 2021 Sep;14(9):1856-1861. doi: 10.1016/j.jcmg.2021.06.002. Epub 2021 Jun 16. PMID: 34246586; PMCID: PMC8245050. <https://www.sciencedirect.com/science/article/pii/S1936878X2100485X>
159. Minocha PK, Better D, Singh RK, et al. Recurrence of Acute Myocarditis Temporally Associated with Receipt of the mRNA Coronavirus Disease 2019 (COVID-19) Vaccine in a Male Adolescent. *J Pediatr*. 2021 Nov;238:321-323. doi: 10.1016/j.jpeds.2021.06.035. Epub 2021 Jun 22. PMID: 34166671; PMCID: PMC8216855. <https://www.sciencedirect.com/science/article/pii/S002234762100617X>
160. Abbate A, Gavin J, Madanchi N, et al. Fulminant myocarditis and systemic hyperinflammation temporally associated with BNT162b2 mRNA COVID-19 vaccination in two patients. *Int J Cardiol*. 2021 Oct 1;340:119-121. doi: 10.1016/j.ijcard.2021.08.018. Epub 2021 Aug 18. PMID: 34416319; PMCID: PMC8372420. <https://www.sciencedirect.com/science/article/pii/S0167527321012286>.
161. Habib MB, Hamamyh T, Elyas A, et al. Acute myocarditis following administration of BNT162b2 vaccine. *IDCases*. 2021 Jun 16;25:e01197. doi: 10.1016/j.idcr.2021.e01197. PMID: 34189042; PMCID: PMC8220234. <https://www.sciencedirect.com/science/article/pii/S2214250921001530>
162. Ujueta F, Azimi R, Lozier MR, et al. Lymphohistocytic myocarditis after Ad26.COV2.S viral vector COVID-19 vaccination. *Int J Cardiol Heart Vasc*. 2021 Oct;36:100869. doi: 10.1016/j.ijcha.2021.100869. Epub 2021 Sep 7. PMID: 34514078; PMCID: PMC8421108. <https://www.sciencedirect.com/science/article/pii/S2352906721001573>
163. Watkins K, Griffin G, Septaric K, et al. Myocarditis after BNT162b2 vaccination in a healthy male. *Am J Emerg Med*. 2021 Dec;50:815.e1-815.e2. doi: 10.1016/j.ajem.2021.06.051. Epub 2021 Jun 29. PMID: 34229940; PMCID: PMC8238643. <https://www.sciencedirect.com/science/article/pii/S0735675721005362>

164. Patrignani A, Schicchi N, Calcagnoli F, et al. Acute myocarditis following Comirnaty vaccination in a healthy man with previous SARS-CoV-2 infection. *Radiol Case Rep.* 2021 Nov;16(11):3321-3325. doi: 10.1016/j.radcr.2021.07.082. Epub 2021 Aug 2. PMID: 34367386; PMCID: PMC8326008. <https://www.sciencedirect.com/science/article/pii/S1930043321005549>
165. Schauer J, Buddhe S, Colyer J, et al. Myopericarditis After the Pfizer Messenger Ribonucleic Acid Coronavirus Disease Vaccine in Adolescents. *J Pediatr.* 2021 Nov;238:317-320. doi: 10.1016/j.jpeds.2021.06.083. Epub 2021 Jul 3. PMID: 34228985; PMCID: PMC8253718. <https://www.sciencedirect.com/science/article/pii/S002234762100665X>
166. Ramírez-García A, Lozano Jiménez S, Darnaude Ximénez I, et al. Pericarditis after administration of the BNT162b2 mRNA COVID-19 vaccine. *Rev Esp Cardiol (Engl Ed).* 2021 Dec;74(12):1120-1122. doi: 10.1016/j.rec.2021.07.005. Epub 2021 Jul 16. PMID: 34364831; PMCID: PMC8282480. <https://www.sciencedirect.com/science/article/pii/S1885585721002218>
167. Williams CB, Choi JI, Hosseini F, et al. Acute Myocarditis Following mRNA-1273 SARS-CoV-2 Vaccination. *CJC Open.* 2021 Nov;3(11):1410-1412. doi: 10.1016/j.cjco.2021.07.008. Epub 2021 Jul 14. PMID: 34308326; PMCID: PMC8278869. <https://www.sciencedirect.com/science/article/pii/S2589790X21001931>
168. Ammirati E, Cavalotti C, Milazzo A, et al. Temporal relation between second dose BNT162b2 mRNA Covid-19 vaccine and cardiac involvement in a patient with previous SARS-COV-2 infection. *Int J Cardiol Heart Vasc.* 2021 Jun;34:100774. doi: 10.1016/j.ijcha.2021.100774. Epub 2021 Mar 31. PMID: 33821210; PMCID: PMC8011690. <https://www.sciencedirect.com/science/article/pii/S2352906721000622>
169. Das BB, Kohli U, Ramachandran P, et al. Myopericarditis after messenger RNA Coronavirus Disease 2019 Vaccination in Adolescents 12 to 18 Years of Age. *J Pediatr.* 2021 Nov;238:26-32.e1. doi: 10.1016/j.jpeds.2021.07.044. Epub 2021 Jul 30. PMID: 34339728; PMCID: PMC8321962. <https://www.sciencedirect.com/science/article/pii/S0022347621007368>
170. Cimaglia P, Tolomeo P, Rapezzi C. Acute myocarditis after SARS-CoV-2 vaccination in a 24-year-old man. *Rev Port Cardiol.* 2022 Jan;41(1):71-72. doi: 10.1016/j.repc.2021.07.005. Epub 2021 Jul 24. PMID: 34334935; PMCID: PMC8302854. <https://www.sciencedirect.com/science/article/pii/S0870255121003243>
171. Long SS. Important Insights into Myopericarditis after the Pfizer mRNA COVID-19 Vaccination in Adolescents. *J Pediatr.* 2021 Nov;238:5. doi: 10.1016/j.jpeds.2021.07.057. Epub 2021 Jul 29. PMID: 34332972; PMCID: PMC8440228. <https://www.sciencedirect.com/science/article/pii/S0022347621007496>

172. Dickey JB, Albert E, Badr M, et al. A Series of Patients With Myocarditis Following SARS-CoV-2 Vaccination With mRNA-1279 and BNT162b2. *JACC Cardiovasc Imaging*. 2021 Sep;14(9):1862-1863. doi: 10.1016/j.jcmg.2021.06.003. Epub 2021 Jun 16. PMID: 34246585; PMCID: PMC8219373. <https://www.sciencedirect.com/science/article/pii/S1936878X21004861>
173. Boscolo Berto M, Spano G, Wagner B et al. Takotsubo Cardiomyopathy After mRNA COVID-19 Vaccination. *Heart Lung Circ*. 2021 Dec;30(12):e119-e120. doi: 10.1016/j.hlc.2021.06.521. Epub 2021 Jul 15. PMID: 34330629; PMCID: PMC8279960. <https://www.sciencedirect.com/science/article/pii/S1443950621011331>
174. Singh B, Kaur P, Cedeno L, et al. COVID-19 mRNA Vaccine and Myocarditis. *Eur J Case Rep Intern Med*. 2021 Jun 14;8(7):002681. doi: 10.12890/2021_002681. PMID: 34268277; PMCID: PMC8276934. <https://pubmed.ncbi.nlm.nih.gov/34268277/>
175. Salah HM, Mehta JL. COVID-19 Vaccine and Myocarditis. *Am J Cardiol*. 2021 Oct 15;157:146-148. doi: 10.1016/j.amjcard.2021.07.009. Epub 2021 Jul 12. PMID: 34399967; PMCID: PMC8272967. <https://pubmed.ncbi.nlm.nih.gov/34399967/>
176. Park H, Yun KW, Kim KR, et al. Epidemiology and Clinical Features of Myocarditis/Pericarditis before the Introduction of mRNA COVID-19 Vaccine in Korean Children: a Multicenter Study. *J Korean Med Sci*. 2021 Aug 16;36(32):e232. doi: 10.3346/jkms.2021.36.e232. PMID: 34402230; PMCID: PMC8369310. <https://search.bvsalud.org/global-literature-on-novel-coronavirus-2019-ncov/resource/en/covidwho-1360706>.
177. Kerneis M, Bihan K, Salem JE. COVID-19 vaccines and myocarditis. *Arch Cardiovasc Dis*. 2021 Jun-Jul;114(6-7):515-517. doi: 10.1016/j.acvd.2021.06.001. Epub 2021 Jun 26. PMID: 34246566; PMCID: PMC8233865. <https://pubmed.ncbi.nlm.nih.gov/34246566/>
178. Vidula MK, Ambrose M, Glassberg H, et al. Myocarditis and Other Cardiovascular Complications of the mRNA-Based COVID-19 Vaccines. *Cureus*. 2021 Jun 10;13(6):e15576. doi: 10.7759/cureus.15576. PMID: 34277198; PMCID: PMC8270057. <https://www.cureus.com/articles/61030-myocarditis-and-other-cardiovascular-complications-of-the-mrna-based-covid-19-vaccines>
179. Pepe S, Gregory AT, Denniss AR. Myocarditis, Pericarditis and Cardiomyopathy After COVID-19 Vaccination. *Heart Lung Circ*. 2021 Oct;30(10):1425-1429. doi: 10.1016/j.hlc.2021.07.011. Epub 2021 Jul 31. PMID: 34340927; PMCID: PMC8324414. <https://pubmed.ncbi.nlm.nih.gov/34340927/>

180. Bozkurt B, Kamat I, Hotez PJ. Myocarditis With COVID-19 mRNA Vaccines. *Circulation*. 2021 Aug 10;144(6):471-484. doi: 10.1161/CIRCULATIONAHA.121.056135. Epub 2021 Jul 20. PMID: 34281357; PMCID: PMC8340726.
<https://www.ahajournals.org/doi/10.1161/CIRCULATIONAHA.121.056135>
181. Dionne A, Sperotto F, Chamberlain S, et al. Association of Myocarditis With BNT162b2 Messenger RNA COVID-19 Vaccine in a Case Series of Children. *JAMA Cardiol*. 2021 Dec 1;6(12):1446-1450. doi: 10.1001/jamacardio.2021.3471. PMID: 34374740; PMCID: PMC8356143. <https://jamanetwork.com/journals/jamacardiology/fullarticle/2783052>
182. Montgomery J, Ryan M, Engler R, et al. Myocarditis Following Immunization With mRNA COVID-19 Vaccines in Members of the US Military. *JAMA Cardiol*. 2021 Oct 1;6(10):1202-1206. doi: 10.1001/jamacardio.2021.2833. PMID: 34185045; PMCID: PMC8243257. <https://jamanetwork.com/journals/jamacardiology/fullarticle/2781601%5C>
183. Shay DK, Shimabukuro TT, DeStefano F. Myocarditis Occurring After Immunization With mRNA-Based COVID-19 Vaccines. *JAMA Cardiol*. 2021 Oct 1;6(10):1115-1117. doi: 10.1001/jamacardio.2021.2821. PMID: 34185047. <https://jamanetwork.com/journals/jamacardiology/fullarticle/2781600>
184. Verma AK, Lavine KJ, Lin CY. Myocarditis after Covid-19 mRNA Vaccination. *N Engl J Med*. 2021 Sep 30;385(14):1332-1334. doi: 10.1056/NEJMc2109975. Epub 2021 Aug 18. PMID: 34407340; PMCID: PMC8385564. <https://www.nejm.org/doi/full/10.1056/NEJMc2109975>
185. Kim HW, Jenista ER, Wendell DC, et al. Patients With Acute Myocarditis Following mRNA COVID-19 Vaccination. *JAMA Cardiol*. 2021 Oct 1;6(10):1196-1201. doi: 10.1001/jamacardio.2021.2828. PMID: 34185046; PMCID: PMC8243258. <https://jamanetwork.com/journals/jamacardiology/fullarticle/2781602>
186. Starekova J, Bluemke DA, Bradham WS, et al. Myocarditis Associated with mRNA COVID-19 Vaccination. *Radiology*. 2021 Nov;301(2):E409-E411. doi: 10.1148/radiol.2021211430. Epub 2021 Jul 20. PMID: 34282971; PMCID: PMC8574056. <https://pubs.rsna.org/doi/10.1148/radiol.2021211430>
187. Marshall M, Ferguson ID, Lewis P, et al. Symptomatic Acute Myocarditis in 7 Adolescents After Pfizer-BioNTech COVID-19 Vaccination. *Pediatrics*. 2021 Sep;148(3):e2021052478. doi: 10.1542/peds.2021-052478. Epub 2021 Jun 4. PMID: 34088762. <https://pediatrics.aappublications.org/content/148/3/e2021052478>

188. Patel YR, Louis DW, Atalay M, et al. Cardiovascular magnetic resonance findings in young adult patients with acute myocarditis following mRNA COVID-19 vaccination: a case series. *J Cardiovasc Magn Reson*. 2021 Sep 9;23(1):101. doi: 10.1186/s12968-021-00795-4. PMID: 34496880; PMCID: PMC8425992. <https://jcmr-online.biomedcentral.com/articles/10.1186/s12968-021-00795-4>
189. Wong P, McCrindle B, Wong K. Clinical Guidance for Young People with Myocarditis and Pericarditis after Vaccination with COVID-19 mRNA. 2021 sept 1. Canadian Pediatric Society. <https://www.cps.ca/en/documents/position/clinical-guidance-for-youth-with-myocarditis-and-pericarditis>
190. Kim IC, Kim H, Lee HJ, et al. Cardiac Imaging of Acute Myocarditis Following COVID-19 mRNA Vaccination. *J Korean Med Sci*. 2021 Aug 16;36(32):e229. doi: 10.3346/jkms.2021.36.e229. PMID: 34402228; PMCID: PMC8369314. <https://pubmed.ncbi.nlm.nih.gov/34402228/>
191. Tailor PD, Feighery AM, El-Sabawi B, et al. Case report: acute myocarditis following the second dose of mRNA-1273 SARS-CoV-2 vaccine. *Eur Heart J Case Rep*. 2021 Aug 4;5(8):ytab319. doi: 10.1093/ehjcr/ytab319. PMID: 34514306; PMCID: PMC8422333. <https://academic.oup.com/ehjcr/article/5/8/ytab319/6339567>
192. Chang JC, Hawley HB. Vaccine-Associated Thrombocytopenia and Thrombosis: Venous Endotheliopathy Leading to Venous Combined Micro-Macrothrombosis. *Medicina (Kaunas)*. 2021 Oct 26;57(11):1163. doi: 10.3390/medicina57111163. PMID: 34833382; PMCID: PMC8621006. https://science.gc.ca/eic/site/063.nsf/eng/h_98291.html
193. Snapiri O, Rosenberg Danziger C, Shirman N, et al. Transient Cardiac Injury in Adolescents Receiving the BNT162b2 mRNA COVID-19 Vaccine. *Pediatr Infect Dis J*. 2021 Oct 1;40(10):e360-e363. doi: 10.1097/INF.0000000000003235. PMID: 34077949; PMCID: PMC8443419. [https://journals.lww.com/pidj/Abstract/9000/Transient Cardiac Injury in Adolescents Receiving.95800.aspx](https://journals.lww.com/pidj/Abstract/9000/Transient_Cardiac_Injury_in_Adolescents_Receiving.95800.aspx)
194. Tano E, San Martin S, Girgis S, et al. Perimyocarditis in Adolescents After Pfizer-BioNTech COVID-19 Vaccine. *J Pediatric Infect Dis Soc*. 2021 Nov 11;10(10):962-966. doi: 10.1093/jpids/piab060. PMID: 34319393; PMCID: PMC8344528. <https://academic.oup.com/jpids/advance-article/doi/10.1093/jpids/piab060/6329543>
195. Lazaros G, Klein AL, Hatziantoniou S, et al. The Novel Platform of mRNA COVID-19 Vaccines and Myocarditis: Clues into the Potential Underlying Mechanism. *Vaccine*. 2021 Aug 16;39(35):4925-4927. doi: 10.1016/j.vaccine.2021.07.016. Epub 2021 Jul 13. PMID: 34312010; PMCID: PMC8275472. <https://pubmed.ncbi.nlm.nih.gov/34312010/>

196. Deb A, Abdelmalek J, Iwuji K, et al. Acute Myocardial Injury Following COVID-19 Vaccination: A Case Report and Review of Current Evidence from Vaccine Adverse Events Reporting System Database. *J Prim Care Community Health*. 2021 Jan-Dec;12:21501327211029230. doi: 10.1177/21501327211029230. PMID: 34219532; PMCID: PMC8255555. <https://pubmed.ncbi.nlm.nih.gov/34219532/>
197. Han T, Ma W, Shang, Wang C. Be Alert to the Risk of Adverse Cardiovascular Events after COVID-19 vaccination. *Exploratory Research and Hypothesis in Medicine*. 2020. <https://www.xiahepublishing.com/2472-0712/ERHM-2021-00033>
198. Viskin D, Topilsky Y, Aviram G, et al. Myocarditis Associated With COVID-19 Vaccination: Echocardiography, Cardiac Tomography, and Magnetic Resonance Imaging Findings. *Circ Cardiovasc Imaging*. 2021 Sep;14(9):e013236. doi: 10.1161/CIRCIMAGING.121.013236. Epub 2021 Aug 25. PMID: 34428917; PMCID: PMC8478100. <https://www.ahajournals.org/doi/10.1161/CIRCIMAGING.121.013236>
199. Muthukumar A, Narasimhan M, Li QZ, et al. In-Depth Evaluation of a Case of Presumed Myocarditis After the Second Dose of COVID-19 mRNA Vaccine. *Circulation*. 2021 Aug 10;144(6):487-498. doi: 10.1161/CIRCULATIONAHA.121.056038. Epub 2021 Jun 16. PMID: 34133883; PMCID: PMC8340727. <https://www.ahajournals.org/doi/10.1161/CIRCULATIONAHA.121.056038>
200. Chamling B, Vehof V, Drakos S, et al. Occurrence of acute infarct-like myocarditis following COVID-19 vaccination: just an accidental co-incidence or rather vaccination-associated autoimmune myocarditis? *Clin Res Cardiol*. 2021 Nov;110(11):1850-1854. doi: 10.1007/s00392-021-01916-w. Epub 2021 Jul 31. PMID: 34333695; PMCID: PMC8325525. <https://pubmed.ncbi.nlm.nih.gov/34333695/>
201. Minocha PK, Better D, Singh RK, et al. Recurrence of Acute Myocarditis Temporally Associated with Receipt of the mRNA Coronavirus Disease 2019 (COVID-19) Vaccine in a Male Adolescent. *J Pediatr*. 2021;238:321-323. doi:10.1016/j.jpeds.2021.06.035 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8216855/>
202. D'Angelo T, Cattafi A, Carerj ML, et al. Myocarditis After SARS-CoV-2 Vaccination: A Vaccine-Induced Reaction? *Can J Cardiol*. 2021 Oct;37(10):1665-1667. doi: 10.1016/j.cjca.2021.05.010. Epub 2021 Jun 9. PMID: 34118375; PMCID: PMC8187737. <https://pubmed.ncbi.nlm.nih.gov/34118375/>
203. Park J, Brekke DR, Bratincsak A. Self-limited myocarditis presenting with chest pain and ST segment elevation in adolescents after vaccination with the BNT162b2 mRNA vaccine. *Cardiol Young*. 2022 Jan;32(1):146-149. doi: 10.1017/S1047951121002547. Epub 2021 Jun 28. PMID: 34180390. <https://pubmed.ncbi.nlm.nih.gov/34180390/>

204. McLean K, Johnson TJ. Myopericarditis in a previously healthy adolescent male following COVID-19 vaccination: A case report. *Acad Emerg Med*. 2021 Aug;28(8):918-921. doi: 10.1111/acem.14322. Epub 2021 Jul 21. PMID: 34133825; PMCID: PMC8441784. <https://pubmed.ncbi.nlm.nih.gov/34133825/>
205. Ehrlich P, Klingel K, Ohlmann-Knafo S, et al. Biopsy-proven lymphocytic myocarditis following first mRNA COVID-19 vaccination in a 40-year-old male: case report. *Clin Res Cardiol*. 2021 Nov;110(11):1855-1859. doi: 10.1007/s00392-021-01936-6. Epub 2021 Sep 6. PMID: 34487236; PMCID: PMC8419377. <https://pubmed.ncbi.nlm.nih.gov/34487236/>
206. Knowlton KU. Insights from a murine model of COVID-19 mRNA vaccination-induced myopericarditis: Could accidental intravenous vaccine injection induce myopericarditis? *Clin Infect Dis*. 2021 Aug 28:ciab741. doi: 10.1093/cid/ciab741. Epub ahead of print. PMID: 34453510. <https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciab741/6359059>
207. Khogali F, Abdelrahman R. Unusual Presentation of Acute Perimyocarditis Following SARS-COV-2 mRNA-1237 Moderna Vaccination. *Cureus*. 2021 Jul 23;13(7):e16590. doi: 10.7759/cureus.16590. PMID: 34447639; PMCID: PMC8381757. <https://pubmed.ncbi.nlm.nih.gov/34447639/>
208. Hasnie AA, Hasnie UA, Patel N, Aziz MU, Xie M, Lloyd SG, Prabhu SD. Perimyocarditis following first dose of the mRNA-1273 SARS-CoV-2 (Moderna) vaccine in a healthy young male: a case report. *BMC Cardiovasc Disord*. 2021 Aug 4;21(1):375. doi: 10.1186/s12872-021-02183-3. PMID: 34348657; PMCID: PMC8334333.
209. Cereda A, Conca C, Barbieri L, et al. Acute myocarditis after the second dose of SARS-CoV-2 vaccine: Serendipity or atypical causal relationship? *Anatol J Cardiol*. 2021 Jul;25(7):522-523. doi: 10.5152/AnatolJCardiol.2021.99. PMID: 34236331; PMCID: PMC8274899. <https://pubmed.ncbi.nlm.nih.gov/34236331/>
210. Bautista García J, Peña Ortega P, Bonilla Fernández JA, et al. Miocarditis aguda tras administración de vacuna BNT162b2 contra la COVID-19 [Acute myocarditis after administration of the BNT162b2 vaccine against COVID-19]. *Rev Esp Cardiol*. 2021 Sep;74(9):812-814. Spanish. doi: 10.1016/j.recesp.2021.03.009. Epub 2021 Mar 20. PMID: 33776190; PMCID: PMC7980176. <https://www.sciencedirect.com/science/article/abs/pii/S188558572100133X>
211. Vidula MK, Ambrose M, Glassberg H, et al. Myocarditis and Other Cardiovascular Complications of the mRNA-Based COVID-19 Vaccines. *Cureus*. 2021 Jun 10;13(6):e15576. doi: 10.7759/cureus.15576. PMID: 34277198; PMCID: PMC8270057. <https://pubmed.ncbi.nlm.nih.gov/34277198/>

212. Ramírez-García A, Lozano Jiménez S, Darnaude Ximénez I, et al. Pericarditis after administration of the BNT162b2 mRNA COVID-19 vaccine. *Rev Esp Cardiol (Engl Ed)*. 2021 Dec;74(12):1120-1122. doi: 10.1016/j.rec.2021.07.005. Epub 2021 Jul 16. PMID: 34364831; PMCID: PMC8282480. <https://pubmed.ncbi.nlm.nih.gov/34364831/>
213. Khogali F, Abdelrahman R. Unusual Presentation of Acute Perimyocarditis Following SARS-COV-2 mRNA-1237 Moderna Vaccination. *Cureus*. 2021 Jul 23;13(7):e16590. doi: 10.7759/cureus.16590. PMID: 34447639; PMCID: PMC8381757. <https://pubmed.ncbi.nlm.nih.gov/34447639/>
214. Tailor PD, Feighery AM, El-Sabawi B, et al. Case report: acute myocarditis following the second dose of mRNA-1273 SARS-CoV-2 vaccine. *Eur Heart J Case Rep*. 2021 Aug 4;5(8):ytab319. doi: 10.1093/ehjcr/ytab319. PMID: 34514306; PMCID: PMC8422333. <https://pubmed.ncbi.nlm.nih.gov/34514306/>
215. Knowlton KU. Insights from a murine model of COVID-19 mRNA vaccination-induced myopericarditis: Could accidental intravenous vaccine injection induce myopericarditis? *Clin Infect Dis*. 2021 Aug 28:ciab741. doi: 10.1093/cid/ciab741. Epub ahead of print. PMID: 34453510. <https://pubmed.ncbi.nlm.nih.gov/34453510/>
216. Łażniak-Pfajfer A, Surmacz R, Rajewska-Tabor J, et al. Myocarditis associated with COVID-19 vaccination in three teenage males. *Pol Arch Intern Med*. 2021 Dec 1. doi: 10.20452/pamw.16160. Epub ahead of print. PMID: 34851078. <https://pubmed.ncbi.nlm.nih.gov/34851078/>.
217. Patel YR, Louis DW, Atalay M, et al. Cardiovascular magnetic resonance findings in young adult patients with acute myocarditis following mRNA COVID-19 vaccination: a case series. *J Cardiovasc Magn Reson*. 2021 Sep 9;23(1):101. doi: 10.1186/s12968-021-00795-4. PMID: 34496880; PMCID: PMC8425992. <https://pubmed.ncbi.nlm.nih.gov/34496880/>
218. Tinoco M, Leite S, Faria B, et al. Perimyocarditis Following COVID-19 Vaccination. *Clin Med Insights Cardiol*. 2021 Nov 24;15:11795468211056634. doi: 10.1177/11795468211056634. PMID: 34866957; PMCID: PMC8637777. <https://pubmed.ncbi.nlm.nih.gov/34866957/>
219. Chua GT, Kwan MYW, Chui CSL, et al. Epidemiology of Acute Myocarditis/Pericarditis in Hong Kong Adolescents Following Comirnaty Vaccination. *Clin Infect Dis*. 2021 Nov 28:ciab989. doi: 10.1093/cid/ciab989. Epub ahead of print. PMID: 34849657; PMCID: PMC8767823. <https://pubmed.ncbi.nlm.nih.gov/34849657/>.
220. Choi S, Lee S, Seo JW, et al. Myocarditis-induced Sudden Death after BNT162b2 mRNA COVID-19 Vaccination in Korea: Case Report Focusing on Histopathological Findings. *J Korean Med Sci*. 2021 Oct 18;36(40):e286. doi: 10.3346/jkms.2021.36.e286. PMID: 34664804; PMCID: PMC8524235. <https://pubmed.ncbi.nlm.nih.gov/34664804/>

221. Simone A, Herald J, Chen A, et al. Acute Myocarditis Following COVID-19 mRNA Vaccination in Adults Aged 18 Years or Older. *JAMA Intern Med.* 2021 Dec 1;181(12):1668-1670. doi: 10.1001/jamainternmed.2021.5511. PMID: 34605853; PMCID: PMC8491129. <https://pubmed.ncbi.nlm.nih.gov/34605853/>
222. Minocha PK, Better D, Singh RK, et al. Recurrence of Acute Myocarditis Temporally Associated with Receipt of the mRNA Coronavirus Disease 2019 (COVID-19) Vaccine in a Male Adolescent. *J Pediatr.* 2021 Nov;238:321-323. doi: 10.1016/j.jpeds.2021.06.035. Epub 2021 Jun 22. PMID: 34166671; PMCID: PMC8216855. <https://pubmed.ncbi.nlm.nih.gov/34166671/>
223. Kaneta K, Yokoi K, Jojima K, et al. Young Male With Myocarditis Following mRNA-1273 Vaccination Against Coronavirus Disease-2019 (COVID-19). *Circ J.* 2021 Nov 6. doi: 10.1253/circj.CJ-21-0818. Epub ahead of print. PMID: 34744118. <https://pubmed.ncbi.nlm.nih.gov/34744118/>
224. Cimaglia P, Tolomeo P, Rapezzi C. Acute myocarditis after SARS-CoV-2 vaccination in a 24-year-old man. *Rev Port Cardiol.* 2022 Jan;41(1):71-72. doi: 10.1016/j.repc.2021.07.005. Epub 2021 Jul 24. PMID: 34334935; PMCID: PMC8302854. <https://pubmed.ncbi.nlm.nih.gov/34334935/>.
225. Boursier C, Chevalier E, Filippetti L, et al. 68Ga-DOTATOC digital-PET imaging of inflammatory cell infiltrates in myocarditis following COVID-19 vaccination. *Eur J Nucl Med Mol Imaging.* 2021 Nov 8:1–2. doi: 10.1007/s00259-021-05609-4. Epub ahead of print. PMID: 34746968; PMCID: PMC8572651. <https://pubmed.ncbi.nlm.nih.gov/34746968/>
226. Chamling B, Vehof V, Drakos S, et al. Occurrence of acute infarct-like myocarditis following COVID-19 vaccination: just an accidental co-incidence or rather vaccination-associated autoimmune myocarditis? *Clin Res Cardiol.* 2021 Nov;110(11):1850-1854. doi: 10.1007/s00392-021-01916-w. Epub 2021 Jul 31. PMID: 34333695; PMCID: PMC8325525. <https://pubmed.ncbi.nlm.nih.gov/34333695/>.
227. Park J, Brekke DR, Bratincsak A. Self-limited myocarditis presenting with chest pain and ST segment elevation in adolescents after vaccination with the BNT162b2 mRNA vaccine. *Cardiol Young.* 2022 Jan;32(1):146-149. doi: 10.1017/S1047951121002547. Epub 2021 Jun 28. PMID: 34180390. <https://pubmed.ncbi.nlm.nih.gov/34180390/>
228. Montgomery J, Ryan M, Engler R, et al. Myocarditis Following Immunization With mRNA COVID-19 Vaccines in Members of the US Military. *JAMA Cardiol.* 2021 Oct 1;6(10):1202-1206. doi: 10.1001/jamacardio.2021.2833. PMID: 34185045; PMCID: PMC8243257. <https://pubmed.ncbi.nlm.nih.gov/34185045/>

229. Watkins K, Griffin G, Septaric K, et al. Myocarditis after BNT162b2 vaccination in a healthy male. *Am J Emerg Med*. 2021 Dec;50:815.e1-815.e2. doi: 10.1016/j.ajem.2021.06.051. Epub 2021 Jun 29. PMID: 34229940; PMCID: PMC8238643. <https://pubmed.ncbi.nlm.nih.gov/34229940/>
230. McLean K, Johnson TJ. Myopericarditis in a previously healthy adolescent male following COVID-19 vaccination: A case report. *Acad Emerg Med*. 2021 Aug;28(8):918-921. doi: 10.1111/acem.14322. Epub 2021 Jul 21. PMID: 34133825; PMCID: PMC8441784. <https://pubmed.ncbi.nlm.nih.gov/34133825/>
231. Williams CB, Choi JI, Hosseini F, et al. Acute Myocarditis Following mRNA-1273 SARS-CoV-2 Vaccination. *CJC Open*. 2021 Nov;3(11):1410-1412. doi: 10.1016/j.cjco.2021.07.008. Epub 2021 Jul 14. PMID: 34308326; PMCID: PMC8278869. <https://pubmed.ncbi.nlm.nih.gov/34308326/>.
232. Takase B, Hayashi K, Hisada T, et al. Chest Pain with New Abnormal Electrocardiogram Development after Injection of COVID-19 Vaccine Manufactured by Moderna. *Intern Med*. 2021 Dec 4. doi: 10.2169/internalmedicine.8711-21. Epub ahead of print. PMID: 34866106. <https://pubmed.ncbi.nlm.nih.gov/34866106/>
233. Ehrlich P, Klingel K, Ohlmann-Knafo S, et al. Biopsy-proven lymphocytic myocarditis following first mRNA COVID-19 vaccination in a 40-year-old male: case report. *Clin Res Cardiol*. 2021 Nov;110(11):1855-1859. doi: 10.1007/s00392-021-01936-6. Epub 2021 Sep 6. PMID: 34487236; PMCID: PMC8419377. <https://pubmed.ncbi.nlm.nih.gov/34487236/>
234. Kadwalwala M, Chadha B, Ortoleva J, et al. Multimodality imaging and histopathology in a young man presenting with fulminant lymphocytic myocarditis and cardiogenic shock after mRNA-1273 vaccination. *BMJ Case Rep*. 2021 Nov 30;14(11):e246059. doi: 10.1136/bcr-2021-246059. PMID: 34848416; PMCID: PMC8634223. <https://pubmed.ncbi.nlm.nih.gov/34848416/>
235. Kim D, Choi JH, Jang JY, et al. A Case Report for Myopericarditis after BNT162b2 COVID-19 mRNA Vaccination in a Korean Young Male. *J Korean Med Sci*. 2021 Oct 11;36(39):e277. doi: 10.3346/jkms.2021.36.e277. PMID: 34636504; PMCID: PMC8506415. <https://pubmed.ncbi.nlm.nih.gov/34636504/>
236. Patrignani A, Schicchi N, Calcagnoli F, et al. Acute myocarditis following Comirnaty vaccination in a healthy man with previous SARS-CoV-2 infection. *Radiol Case Rep*. 2021 Nov;16(11):3321-3325. doi: 10.1016/j.radcr.2021.07.082. Epub 2021 Aug 2. PMID: 34367386; PMCID: PMC8326008. <https://pubmed.ncbi.nlm.nih.gov/34367386/>
237. Facetti S, Giraldi M, Vecchi AL, et al. Miocardite acuta in giovane adulto due giorni dopo vaccino Pfizer [Acute myocarditis in a young adult two days after Pfizer vaccination]. *G Ital*

- Cardiol (Rome). 2021 Nov;22(11):891-893. Italian. doi: 10.1714/3689.36746. PMID: 34709227. <https://pubmed.ncbi.nlm.nih.gov/34709227/>
238. Lim Y, Kim MC, Kim KH, et al. Case Report: Acute Fulminant Myocarditis and Cardiogenic Shock After Messenger RNA Coronavirus Disease 2019 Vaccination Requiring Extracorporeal Cardiopulmonary Resuscitation. *Front Cardiovasc Med*. 2021 Oct 29;8:758996. doi: 10.3389/fcvm.2021.758996. PMID: 34778411; PMCID: PMC8586196. <https://pubmed.ncbi.nlm.nih.gov/34778411/>
 239. Joob B, Wiwanitkit V. Acute myocarditis after coronavirus disease 2019 vaccination. *Anatol J Cardiol*. 2021 Nov;25(11):841-842. doi: 10.5152/AnatolJCardiol.2021.689. PMID: 34734821; PMCID: PMC8575404. <https://pubmed.ncbi.nlm.nih.gov/34734821/>
 240. Dickey JB, Albert E, Badr M, et al. A Series of Patients With Myocarditis Following SARS-CoV-2 Vaccination With mRNA-1279 and BNT162b2. *JACC Cardiovasc Imaging*. 2021 Sep;14(9):1862-1863. doi: 10.1016/j.jcmg.2021.06.003. Epub 2021 Jun 16. PMID: 34246585; PMCID: PMC8219373. <https://pubmed.ncbi.nlm.nih.gov/34246585/>
 241. Schauer J, Buddhé S, Colyer J, et al. Myopericarditis After the Pfizer Messenger Ribonucleic Acid Coronavirus Disease Vaccine in Adolescents. *J Pediatr*. 2021 Nov;238:317-320. doi: 10.1016/j.jpeds.2021.06.083. Epub 2021 Jul 3. PMID: 34228985; PMCID: PMC8253718. <https://pubmed.ncbi.nlm.nih.gov/34228985/>
 242. Choi YK, Moon JY, Kim J, et al. Postvaccination Multisystem Inflammatory Syndrome in Adult with No Evidence of Prior SARS-CoV-2 Infection. *Emerg Infect Dis*. 2022 Feb;28(2):411-414. doi: 10.3201/eid2802.211938. Epub 2021 Dec 1. PMID: 34852213; PMCID: PMC8798698. <https://pubmed.ncbi.nlm.nih.gov/34852213/>
 243. Maeda M, Isawa T, Tada N. Definite Acute Myocarditis After Coronavirus Disease 2019 mRNA Vaccination. *Circ J*. 2021 Dec 4. doi: 10.1253/circj.CJ-21-0840. Epub ahead of print. PMID: 34866122. <https://pubmed.ncbi.nlm.nih.gov/34866122/>
 244. Maki H, Aikawa T, Ibe T, et al. Biventricular systolic dysfunction in acute myocarditis after SARS-CoV-2 mRNA-1273 vaccination. *Eur Heart J Cardiovasc Imaging*. 2022 Jan 24;23(2):e87. doi: 10.1093/ehjci/jeab206. PMID: 34601566. <https://pubmed.ncbi.nlm.nih.gov/34601566/>
 245. Shiyovich A, Witberg G, Aviv Y, et al. Myocarditis following COVID-19 vaccination: magnetic resonance imaging study. *Eur Heart J Cardiovasc Imaging*. 2021 Nov 5;jeab230. doi: 10.1093/ehjci/jeab230. Epub ahead of print. PMID: 34739045. <https://pubmed.ncbi.nlm.nih.gov/34739045/>.

246. Schmitt P, Demoulin R, Poyet R, et al. Acute Myocarditis after COVID-19 vaccination: A case report. *Rev Med Interne*. 2021 Nov;42(11):797-800. doi: 10.1016/j.revmed.2021.10.003. Epub 2021 Oct 19. PMID: 34740463; PMCID: PMC8523482.: https://docs.google.com/document/d/1Hc4bh_qNbZ7UVm5BLxkRdMPnnl9zcCsl/e
247. Dionne A, Sperotto F, Chamberlain S, et al. Association of Myocarditis With BNT162b2 Messenger RNA COVID-19 Vaccine in a Case Series of Children. *JAMA Cardiol*. 2021 Dec 1;6(12):1446-1450. doi: 10.1001/jamacardio.2021.3471. PMID: 34374740; PMCID: PMC8356143. <https://pubmed.ncbi.nlm.nih.gov/34374740/>
248. Truong DT, Dionne A, Muniz JC, et al. Clinically Suspected Myocarditis Temporally Related to COVID-19 Vaccination in Adolescents and Young Adults: Suspected Myocarditis After COVID-19 Vaccination. *Circulation*. 2022 Feb;145(5):345-356. doi: 10.1161/CIRCULATIONAHA.121.056583. Epub 2021 Dec 6. PMID: 34865500. <https://pubmed.ncbi.nlm.nih.gov/34865500/>
249. Murakami Y, Shinohara M, Oka Y, et al. Myocarditis Following a COVID-19 Messenger RNA Vaccination: A Japanese Case Series. *Intern Med*. 2021 Nov 27. doi: 10.2169/internalmedicine.8731-21. Epub ahead of print. PMID: 34840235. <https://www.ncbi.nlm.nih.gov/pubmed/34840235>
250. Nagasaka T, Koitabashi N, Ishibashi Y, Aet al. Acute Myocarditis Associated with COVID-19 Vaccination: A Case Report. *J Cardiol Cases*. 2021 Dec 3. doi: 10.1016/j.jccase.2021.11.006. Epub ahead of print. PMID: 34876937; PMCID: PMC8639400. <https://www.ncbi.nlm.nih.gov/pubmed/34876937>
251. Ujueta F, Azimi R, Lozier MR, et al. Lymphohistocytic myocarditis after Ad26.COV2.S viral vector COVID-19 vaccination. *Int J Cardiol Heart Vasc*. 2021 Oct;36:100869. doi: 10.1016/j.ijcha.2021.100869. Epub 2021 Sep 7. PMID: 34514078; PMCID: PMC8421108. <https://pubmed.ncbi.nlm.nih.gov/34514078/>
252. Chua GT, Kwan MYW, Chui CSL, et al. Epidemiology of Acute Myocarditis/Pericarditis in Hong Kong Adolescents Following Comirnaty Vaccination. *Clin Infect Dis*. 2021 Nov 28:ciab989. doi: 10.1093/cid/ciab989. Epub ahead of print. PMID: 34849657; PMCID: PMC8767823.: <https://academic.oup.com/cid/advance-article-abstract/doi/10.1093/cid/ciab989/6445179>.
253. Perez Y, Levy ER, Joshi AY, et al. Myocarditis Following COVID-19 mRNA Vaccine: A Case Series and Incidence Rate Determination. *Clin Infect Dis*. 2021 Nov 3:ciab926. doi: 10.1093/cid/ciab926. Epub ahead of print. PMID: 34734240; PMCID: PMC8767838. <https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciab926/6420408>

254. Li M, Yuan J, Lv G, et al. Myocarditis and Pericarditis following COVID-19 Vaccination: Inequalities in Age and Vaccine Types. *J Pers Med*. 2021 Oct 28;11(11):1106. doi: 10.3390/jpm11111106. PMID: 34834458; PMCID: PMC8624452. <https://www.mdpi.com/2075-4426/11/11/1106>
255. Park H, Yun KW, Kim KR, et al. Epidemiology and Clinical Features of Myocarditis/Pericarditis before the Introduction of mRNA COVID-19 Vaccine in Korean Children: a Multicenter Study. *J Korean Med Sci*. 2021 Aug 16;36(32):e232. doi: 10.3346/jkms.2021.36.e232. PMID: 34402230; PMCID: PMC8369310. <https://pubmed.ncbi.nlm.nih.gov/34402230/>
256. Hajjo R, Sabbah DA, Bardaweel SK, et al. Shedding the Light on Post-Vaccine Myocarditis and Pericarditis in COVID-19 and Non-COVID-19 Vaccine Recipients. *Vaccines (Basel)*. 2021 Oct 15;9(10):1186. doi: 10.3390/vaccines9101186. PMID: 34696294; PMCID: PMC8541143. <https://pubmed.ncbi.nlm.nih.gov/34696294/>
257. Visclosky T, Theyyunni N, Klekowski N, et al. Myocarditis Following mRNA COVID-19 Vaccine. *Pediatr Emerg Care*. 2021 Nov 1;37(11):583-584. doi: 10.1097/PEC.0000000000002557. PMID: 34731877. https://journals.lww.com/pec-online/Abstract/2021/11000/Myocarditis_Following_mRNA_COVID_19_Vaccine.9.aspx.
258. Mevorach D, Anis E, Cedar N, et al. Myocarditis after BNT162b2 mRNA Vaccine against Covid-19 in Israel. *N Engl J Med*. 2021 Dec 2;385(23):2140-2149. doi: 10.1056/NEJMoa2109730. Epub 2021 Oct 6. PMID: 34614328; PMCID: PMC8531987. <https://pubmed.ncbi.nlm.nih.gov/34614328/>.
259. Pepe S, Gregory AT, Denniss AR. Myocarditis, Pericarditis and Cardiomyopathy After COVID-19 Vaccination. *Heart Lung Circ*. 2021 Oct;30(10):1425-1429. doi: 10.1016/j.hlc.2021.07.011. Epub 2021 Jul 31. PMID: 34340927; PMCID: PMC8324414. [https://www.heartlungcirc.org/article/S1443-9506\(21\)01156-2/fulltext](https://www.heartlungcirc.org/article/S1443-9506(21)01156-2/fulltext)
260. Vidula MK, Ambrose M, Glassberg H, et al. Myocarditis and Other Cardiovascular Complications of the mRNA-Based COVID-19 Vaccines. *Cureus*. 2021 Jun 10;13(6):e15576. doi: 10.7759/cureus.15576. PMID: 34277198; PMCID: PMC8270057. <https://pubmed.ncbi.nlm.nih.gov/34277198/>
261. Shaw KE, Cavalcante JL, Han BK, et al. Possible Association Between COVID-19 Vaccine and Myocarditis: Clinical and CMR Findings. *JACC Cardiovasc Imaging*. 2021 Sep;14(9):1856-1861. doi: 10.1016/j.jcmg.2021.06.002. Epub 2021 Jun 16. PMID: 34246586; PMCID: PMC8245050. <https://pubmed.ncbi.nlm.nih.gov/34246586/>
262. Kounis NG, Mplani V, Koniari I, et al. Hypersensitivity myocarditis and COVID-19 vaccines. *Kardiol Pol*. 2021 Dec 2. doi: 10.33963/KP.a2021.0166. Epub ahead of print. PMID: 34856634. <https://pubmed.ncbi.nlm.nih.gov/34856634/>.

263. Hendren NS, Carter S, Grodin JL. Severe COVID-19 vaccine associated myocarditis: Zebra or unicorn? *Int J Cardiol.* 2021 Nov 15;343:197-198. doi: 10.1016/j.ijcard.2021.09.036. Epub 2021 Sep 21. PMID: 34560165; PMCID: PMC8453875. [https://www.internationaljournalofcardiology.com/article/S0167-5273\(21\)01477-7/fulltext](https://www.internationaljournalofcardiology.com/article/S0167-5273(21)01477-7/fulltext).
264. Aye YN, Mai AS, Zhang A, et al. Acute Myocardial Infarction and Myocarditis following COVID-19 Vaccination. *QJM.* 2021 Sep 29;hcab252. doi: 10.1093/qjmed/hcab252. Epub ahead of print. PMID: 34586408; PMCID: PMC8522388. <https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC8522388/>
265. Witberg G, Barda N, Hoss S, et al. Myocarditis after Covid-19 Vaccination in a Large Health Care Organization. *N Engl J Med.* 2021 Dec 2;385(23):2132-2139. doi: 10.1056/NEJMoa2110737. Epub 2021 Oct 6. PMID: 34614329; PMCID: PMC8531986. <https://www.nejm.org/doi/10.1056/NEJMoa2110737>
266. Dionne A, Sperotto F, Chamberlain S, et al. Association of Myocarditis With BNT162b2 Messenger RNA COVID-19 Vaccine in a Case Series of Children. *JAMA Cardiol.* 2021 Dec 1;6(12):1446-1450. doi: 10.1001/jamacardio.2021.3471. PMID: 34374740; PMCID: PMC8356143. <https://jamanetwork.com/journals/jamacardiology/fullarticle/2783052>
267. Truong DT, Dionne A, Muniz JC, et al. Clinically Suspected Myocarditis Temporally Related to COVID-19 Vaccination in Adolescents and Young Adults: Suspected Myocarditis After COVID-19 Vaccination. *Circulation.* 2022 Feb;145(5):345-356. doi: 10.1161/CIRCULATIONAHA.121.056583. Epub 2021 Dec 6. PMID: 34865500. https://www.ahajournals.org/doi/abs/10.1161/CIRCULATIONAHA.121.056583?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%20%200pubmed
268. Azir M, Inman B, Webb J, et al. STEMI Mimic: Focal Myocarditis in an Adolescent Patient After mRNA COVID-19 Vaccine. *J Emerg Med.* 2021 Dec;61(6):e129-e132. doi: 10.1016/j.jemermed.2021.09.017. Epub 2021 Sep 27. PMID: 34756746; PMCID: PMC8469220. <https://pubmed.ncbi.nlm.nih.gov/34756746/>
269. Istampoulouoglou I, Dimitriou G, Späni S, et al. Myocarditis and pericarditis in association with COVID-19 mRNA-vaccination: cases from a regional pharmacovigilance centre. *Glob Cardiol Sci Pract.* 2021 Oct 30;2021(3):e202118. doi: 10.21542/gcsp.2021.18. PMID: 34805376; PMCID: PMC8587334. <https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC8587334/>
270. Koizumi T, Awaya T, Yoshioka K, et al. Myocarditis after COVID-19 mRNA vaccines. *QJM.* 2021 Dec 20;114(10):741-743. doi: 10.1093/qjmed/hcab244. PMID: 34546329. <https://pubmed.ncbi.nlm.nih.gov/34546329/>.

271. Kim HW, Jenista ER, Wendell DC, et al. Patients With Acute Myocarditis Following mRNA COVID-19 Vaccination. *JAMA Cardiol.* 2021 Oct 1;6(10):1196-1201. doi: 10.1001/jamacardio.2021.2828. PMID: 34185046; PMCID: PMC8243258. <https://jamanetwork.com/journals/jamacardiology/fullarticle/2781602>.
272. Levin D, Shimon G, Fadlon-Derai M, et al. Myocarditis following COVID-19 vaccination - A case series. *Vaccine.* 2021 Oct 8;39(42):6195-6200. doi: 10.1016/j.vaccine.2021.09.004. Epub 2021 Sep 4. PMID: 34535317; PMCID: PMC8416687. <https://www.sciencedirect.com/science/article/pii/S0264410X21011725?via%3Dihub>.
273. Jain SS, Steele JM, Fonseca B, et al. COVID-19 Vaccination-Associated Myocarditis in Adolescents. *Pediatrics.* 2021 Nov;148(5):e2021053427. doi: 10.1542/peds.2021-053427. Epub 2021 Aug 13. PMID: 34389692. <https://publications.aap.org/pediatrics/article/148/5/e2021053427/181357>
274. Chelala L, Jeudy J, Hossain R, et al. Cardiac MRI Findings of Myocarditis After COVID-19 mRNA Vaccination in Adolescents. *AJR Am J Roentgenol.* 2021 Oct 27. doi: 10.2214/AJR.21.26853. Epub ahead of print. PMID: 34704459. <https://pubmed.ncbi.nlm.nih.gov/34704459/>
275. Shiyovich A, Witberg G, Aviv Y, et al. Myocarditis following COVID-19 vaccination: magnetic resonance imaging study. *Eur Heart J Cardiovasc Imaging.* 2021 Nov 5;jeab230. doi: 10.1093/ehjci/jeab230. Epub ahead of print. PMID: 34739045. <https://academic.oup.com/ehjci/advance-article/doi/10.1093/ehjci/jeab230/6421640>.
276. Miqdad, Mohammed A et al. "Acute Myocarditis Following the Administration of the Second BNT162b2 COVID-19 Vaccine Dose." *Cureus* vol. 13,10 e18880. 18 Oct. 2021, doi:10.7759/cureus.18880 <https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC8599115/>
277. Kaul R, Sreenivasan J, Goel A, Malik A, et al. Myocarditis following COVID-19 vaccination. *Int J Cardiol Heart Vasc.* 2021 Oct;36:100872. doi: 10.1016/j.ijcha.2021.100872. Epub 2021 Sep 20. PMID: 34568540; PMCID: PMC8450283. <https://www.sciencedirect.com/science/article/pii/S2352906721001603>
278. Alania-Torres E, Morillas-Climent H, García-Escrivá A, et al. Case Report: Probable Myocarditis After Covid-19 mRNA Vaccine in a Patient With Arrhythmogenic Left Ventricular Cardiomyopathy. *Front Cardiovasc Med.* 2021 Oct 12;8:759119. doi: 10.3389/fcvm.2021.759119. PMID: 34712717; PMCID: PMC8545905. <https://pubmed.ncbi.nlm.nih.gov/34712717/>.

279. Bautista García J, Peña Ortega P, et al. Acute myocarditis after administration of the BNT162b2 vaccine against COVID-19. *Rev Esp Cardiol (Engl Ed)*. 2021 Sep;74(9):812-814. doi: 10.1016/j.rec.2021.04.005. Epub 2021 Apr 27. PMID: 33994339; PMCID: PMC8075838. <https://www.revespcardiol.org/en-linkresolver-acute-myocarditis-after-administration-bnt162b2-S188558572100133X>.
280. Starekova J, Bluemke DA, Bradham WS, et al. Myocarditis Associated with mRNA COVID-19 Vaccination. *Radiology*. 2021 Nov;301(2):E409-E411. doi: 10.1148/radiol.2021211430. Epub 2021 Jul 20. PMID: 34282971; PMCID: PMC8574056. <https://pubs.rsna.org/doi/10.1148/radiol.2021211430>
281. Schmitt P, Demoulin R, Poyet R, et al. Acute Myocarditis after COVID-19 vaccination: A case report. *Rev Med Interne*. 2021 Nov;42(11):797-800. doi: 10.1016/j.revmed.2021.10.003. Epub 2021 Oct 19. PMID: 34740463; PMCID: PMC8523482. <https://www.sciencedirect.com/science/article/pii/S0248866321007098>
282. Ambati S, Colon M, Mihic M, Sanchez J, Bakar A. Acute Myopericarditis after COVID-19 Vaccine in Teenagers. *Case Rep Cardiol*. 2021 Sep 20;2021:8268755. doi: 10.1155/2021/8268755. PMID: 34589238; PMCID: PMC8476255. <https://pubmed.ncbi.nlm.nih.gov/34589238/>.
283. Tano E, San Martin S, Girgis S, et al. Perimyocarditis in Adolescents After Pfizer-BioNTech COVID-19 Vaccine. *J Pediatric Infect Dis Soc*. 2021 Nov 11;10(10):962-966. doi: 10.1093/jpids/piab060. PMID: 34319393; PMCID: PMC8344528. <https://academic.oup.com/jpids/article/10/10/962/6329543>.
284. Nevet A. Acute myocarditis associated with anti-COVID-19 vaccination. *Clin Exp Vaccine Res*. 2021 May;10(2):196-197. doi: 10.7774/cevr.2021.10.2.196. Epub 2021 May 31. PMID: 34222133; PMCID: PMC8217579. <https://ecevr.org/DOLx.php?id=10.7774/cevr.2021.10.2.196>.
285. Viskin D, Topilsky Y, Aviram G, et al. Myocarditis Associated With COVID-19 Vaccination: Echocardiography, Cardiac Tomography, and Magnetic Resonance Imaging Findings. *Circ Cardiovasc Imaging*. 2021 Sep;14(9):e013236. doi: 10.1161/CIRCIMAGING.121.013236. Epub 2021 Aug 25. PMID: 34428917; PMCID: PMC8478100. <https://pubmed.ncbi.nlm.nih.gov/34428917/>.
286. Marshall M, Ferguson ID, Lewis P, et al. Symptomatic Acute Myocarditis in 7 Adolescents After Pfizer-BioNTech COVID-19 Vaccination. *Pediatrics*. 2021 Sep;148(3):e2021052478. doi: 10.1542/peds.2021-052478. Epub 2021 Jun 4. PMID: 34088762. <https://pubmed.ncbi.nlm.nih.gov/34088762/>.
287. Foltran D, Delmas C, Flumian C, et al. Myocarditis and Pericarditis in Adolescents after First and Second doses of mRNA COVID-19 Vaccines. *Eur Heart J Qual Care Clin Outcomes*.

- 2021 Nov 26;qcab090. doi: 10.1093/ehjqcco/qcab090. Epub ahead of print. PMID: 34849667; PMCID: PMC8690190. <https://pubmed.ncbi.nlm.nih.gov/34849667/>.
288. Calcaterra G, Mehta JL, de Gregorio C, Butera G, Neroni P, Fanos V, Bassareo PP. COVID 19 Vaccine for Adolescents. Concern about Myocarditis and Pericarditis. *Pediatric Reports*. 2021; 13(3):530-533.: <https://www.mdpi.com/2036-7503/13/3/61>.
 289. Kim IC, Kim H, Lee HJ, et al. Cardiac Imaging of Acute Myocarditis Following COVID-19 mRNA Vaccination. *J Korean Med Sci*. 2021 Aug 16;36(32):e229. doi: 10.3346/jkms.2021.36.e229. PMID: 34402228; PMCID: PMC8369314. <https://pubmed.ncbi.nlm.nih.gov/34402228/>
 290. Rosner CM, Genovese L, Tehrani BN, et al. Myocarditis Temporally Associated With COVID-19 Vaccination. *Circulation*. 2021 Aug 10;144(6):502-505. doi: 10.1161/CIRCULATIONAHA.121.055891. Epub 2021 Jun 16. PMID: 34133885; PMCID: PMC8340723. <https://pubmed.ncbi.nlm.nih.gov/34133885/>
 291. Deb A, Abdelmalek J, Iwuji K, et al. Acute Myocardial Injury Following COVID-19 Vaccination: A Case Report and Review of Current Evidence from Vaccine Adverse Events Reporting System Database. *J Prim Care Community Health*. 2021 Jan-Dec;12:21501327211029230. doi: 10.1177/21501327211029230. PMID: 34219532; PMCID: PMC8255555. <https://pubmed.ncbi.nlm.nih.gov/34219532/>
 292. Nagasaka T, Koitabashi N, Ishibashi Y, et al. Acute Myocarditis Associated with COVID-19 Vaccination: A Case Report [published online ahead of print, 2021 Dec 3]. *J Cardiol Cases*. 2021;10.1016/j.jccase.2021.11.006. doi:10.1016/j.jccase.2021.11.006 <https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC8639400/>
 293. Murakami Y, Shinohara M, Oka Y, et al. Myocarditis Following a COVID-19 Messenger RNA Vaccination: A Japanese Case Series. *Intern Med*. 2021 Nov 27. doi: 10.2169/internalmedicine.8731-21. Epub ahead of print. PMID: 34840235. <https://pubmed.ncbi.nlm.nih.gov/34840235/>.
 294. Onderko L, Starobin B, Riviere AE, et al. Myocarditis in the Setting of Recent COVID-19 Vaccination. *Case Rep Cardiol*. 2021 Oct 19;2021:6806500. doi: 10.1155/2021/6806500. PMID: 34712497; PMCID: PMC8548171. <https://pubmed.ncbi.nlm.nih.gov/34712497/>.
 295. Mansour J, Short RG, Bhalla S, et al. Acute myocarditis after a second dose of the mRNA COVID-19 vaccine: a report of two cases. *Clin Imaging*. 2021 Oct;78:247-249. doi: 10.1016/j.clinimag.2021.06.019. Epub 2021 Jun 18. PMID: 34166884; PMCID: PMC8216670.: [https://www.clinicalimaging.org/article/S0899-7071\(21\)00265-5/fulltext](https://www.clinicalimaging.org/article/S0899-7071(21)00265-5/fulltext).

296. Chua GT, Kwan MYW, Chui CSL, et al. Epidemiology of Acute Myocarditis/Pericarditis in Hong Kong Adolescents Following Comirnaty Vaccination. *Clin Infect Dis*. 2021 Nov 28;ciab989. doi: 10.1093/cid/ciab989. Epub ahead of print. PMID: 34849657; PMCID: PMC8767823. <https://academic.oup.com/cid/advance-article-abstract/doi/10.1093/cid/ciab989/6445179>
297. Perez Y, Levy ER, Joshi AY, et al. Myocarditis Following COVID-19 mRNA Vaccine: A Case Series and Incidence Rate Determination. *Clin Infect Dis*. 2021 Nov 3;ciab926. doi: 10.1093/cid/ciab926. Epub ahead of print. PMID: 34734240; PMCID: PMC8767838. <https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciab926/6420408>.
298. Li M, Yuan J, Lv G, et al. Myocarditis and Pericarditis following COVID-19 Vaccination: Inequalities in Age and Vaccine Types. *J Pers Med*. 2021 Oct 28;11(11):1106. doi: 10.3390/jpm11111106. PMID: 34834458; PMCID: PMC8624452. <https://www.mdpi.com/2075-4426/11/11/1106>
299. Park H, Yun KW, Kim KR, et al. Epidemiology and Clinical Features of Myocarditis/Pericarditis before the Introduction of mRNA COVID-19 Vaccine in Korean Children: a Multicenter Study. *J Korean Med Sci*. 2021 Aug 16;36(32):e232. doi: 10.3346/jkms.2021.36.e232. PMID: 34402230; PMCID: PMC8369310. <https://pubmed.ncbi.nlm.nih.gov/34402230/>
300. Hajjo R, Sabbah DA, Bardaweel SK, et al. Shedding the Light on Post-Vaccine Myocarditis and Pericarditis in COVID-19 and Non-COVID-19 Vaccine Recipients. *Vaccines (Basel)*. 2021 Oct 15;9(10):1186. doi: 10.3390/vaccines9101186. PMID: 34696294; PMCID: PMC8541143. <https://pubmed.ncbi.nlm.nih.gov/34696294/>
301. Gargano JW, Wallace M, Hadler SC, et al. Use of mRNA COVID-19 Vaccine After Reports of Myocarditis Among Vaccine Recipients: Update from the Advisory Committee on Immunization Practices - United States, June 2021. *MMWR Morb Mortal Wkly Rep*. 2021 Jul 9;70(27):977-982. doi: 10.15585/mmwr.mm7027e2. PMID: 34237049; PMCID: PMC8312754. <https://www.ncbi.nlm.nih.gov/pubmed/34237049>
302. Gatti M, Raschi E, Moretti U, et al. Influenza Vaccination and Myo-Pericarditis in Patients Receiving Immune Checkpoint Inhibitors: Investigating the Likelihood of Interaction through the Vaccine Adverse Event Reporting System and Vigibase. *Vaccines (Basel)*. 2021 Jan 4;9(1):19. doi: 10.3390/vaccines9010019. PMID: 33406694; PMCID: PMC7823897. <https://www.ncbi.nlm.nih.gov/pubmed/33406694>
303. Gautam N, Saluja P, Fudim M, et al. A Late Presentation of COVID-19 Vaccine-Induced Myocarditis. *Cureus*. 2021 Sep 11;13(9):e17890. doi: 10.7759/cureus.17890. PMID: 34660088; PMCID: PMC8504680. <https://www.ncbi.nlm.nih.gov/pubmed/34660088>

304. Gellad WF. Myocarditis after vaccination against covid-19. *BMJ*. 2021 Dec 16;375:n3090. doi: 10.1136/bmj.n3090. PMID: 34916217. <https://www.ncbi.nlm.nih.gov/pubmed/34916217>
305. Greenhawt M, Abrams EM, Shaker M, et al. The Risk of Allergic Reaction to SARS-CoV-2 Vaccines and Recommended Evaluation and Management: A Systematic Review, Meta-Analysis, GRADE Assessment, and International Consensus Approach. *J Allergy Clin Immunol Pract*. 2021 Oct;9(10):3546-3567. doi: 10.1016/j.jaip.2021.06.006. Epub 2021 Jun 18. PMID: 34153517; PMCID: PMC8248554. <https://www.ncbi.nlm.nih.gov/pubmed/34153517>
306. Haaf P, Kuster GM, Mueller C, et al. The very low risk of myocarditis and pericarditis after mRNA COVID-19 vaccination should not discourage vaccination. *Swiss Med Wkly*. 2021 Oct 19;151:w30087. doi: 10.4414/smw.2021.w30087. PMID: 34668687. <https://www.ncbi.nlm.nih.gov/pubmed/34668687>
307. Hasnie AA, Hasnie UA, Patel N, et al. Perimyocarditis following first dose of the mRNA-1273 SARS-CoV-2 (Moderna) vaccine in a healthy young male: a case report. *BMC Cardiovasc Disord*. 2021 Aug 4;21(1):375. doi: 10.1186/s12872-021-02183-3. PMID: 34348657; PMCID: PMC8334333. <https://www.ncbi.nlm.nih.gov/pubmed/34348657>
308. Abbate A, Gavin J, Madanchi N, et al. Fulminant myocarditis and systemic hyperinflammation temporally associated with BNT162b2 mRNA COVID-19 vaccination in two patients. *Int J Cardiol*. 2021 Oct 1;340:119-121. doi: 10.1016/j.ijcard.2021.08.018. Epub 2021 Aug 18. PMID: 34416319; PMCID: PMC8372420. <https://pubmed.ncbi.nlm.nih.gov/34416319/>.
309. Abbate A, Gavin J, Madanchi N, et al. Fulminant myocarditis and systemic hyperinflammation temporally associated with BNT162b2 mRNA COVID-19 vaccination in two patients. *Int J Cardiol*. 2021 Oct 1;340:119-121. doi: 10.1016/j.ijcard.2021.08.018. Epub 2021 Aug 18. PMID: 34416319; PMCID: PMC8372420. <https://www.ncbi.nlm.nih.gov/pubmed/34416319>
310. Abu Mouch S, Roguin A, Hellou E, et al. Myocarditis following COVID-19 mRNA vaccination. *Vaccine*. 2021 Jun 29;39(29):3790-3793. doi: 10.1016/j.vaccine.2021.05.087. Epub 2021 May 28. PMID: 34092429; PMCID: PMC8162819. <https://www.ncbi.nlm.nih.gov/pubmed/34092429>
311. Albert E, Aurigemma G, Saucedo J, Gerson DS. Myocarditis following COVID-19 vaccination. *Radiol Case Rep*. 2021 Aug;16(8):2142-2145. doi: 10.1016/j.radcr.2021.05.033. Epub 2021 May 18. PMID: 34025885; PMCID: PMC8130498. <https://www.ncbi.nlm.nih.gov/pubmed/34025885>

312. Aye YN, Mai AS, Zhang A, et al. Acute Myocardial Infarction and Myocarditis following COVID-19 Vaccination. QJM. 2021 Sep 29;hcab252. doi: 10.1093/qjmed/hcab252. Epub ahead of print. PMID: 34586408; PMCID: PMC8522388. <https://www.ncbi.nlm.nih.gov/pubmed/34586408>
313. Azir M, Inman B, Webb J, et al. STEMI Mimic: Focal Myocarditis in an Adolescent Patient After mRNA COVID-19 Vaccine. J Emerg Med. 2021 Dec;61(6):e129-e132. doi: 10.1016/j.jemermed.2021.09.017. Epub 2021 Sep 27. PMID: 34756746; PMCID: PMC8469220. <https://www.ncbi.nlm.nih.gov/pubmed/34756746>
314. Bhandari M, Pradhan A, Vishwakarma P, Sethi R. Coronavirus and cardiovascular manifestations- getting to the heart of the matter. World J Cardiol. 2021 Oct 26;13(10):556-565. doi: 10.4330/wjc.v13.i10.556. PMID: 34754400; PMCID: PMC8554355. <https://www.ncbi.nlm.nih.gov/pubmed/34754400>
315. Bozkurt B, Kamat I, Hotez PJ. Myocarditis With COVID-19 mRNA Vaccines. Circulation. 2021 Aug 10;144(6):471-484. doi: 10.1161/CIRCULATIONAHA.121.056135. Epub 2021 Jul 20. PMID: 34281357; PMCID: PMC8340726. <https://www.ncbi.nlm.nih.gov/pubmed/34281357>
316. Kaneta K, Yokoi K, Jojima K, et al. Young Male With Myocarditis Following mRNA-1273 Vaccination Against Coronavirus Disease-2019 (COVID-19). Circ J. 2021 Nov 6. doi: 10.1253/circj.CJ-21-0818. Epub ahead of print. PMID: 34744118. <https://www.ncbi.nlm.nih.gov/pubmed/34744118>
317. Lazaros G, Anastassopoulou C, Hatziantoniou S, et al. A case series of acute pericarditis following COVID-19 vaccination in the context of recent reports from Europe and the United States. Vaccine. 2021 Oct 29;39(45):6585-6590. doi: 10.1016/j.vaccine.2021.09.078. Epub 2021 Oct 5. PMID: 34635376; PMCID: PMC8491922. <https://pubmed.ncbi.nlm.nih.gov/34635376/>
318. Shen X, Koh MSH, Lim BY, et al. Acute pericarditis and cardiac tamponade after Covid-19 vaccination. Singapore Med J. 2021 Nov 8. doi: 10.11622/smedj.2021195. Epub ahead of print. PMID: 34749492. <https://pubmed.ncbi.nlm.nih.gov/34749492/>
319. Foltran D, Delmas C, Flumian C, et al. Myocarditis and Pericarditis in Adolescents after First and Second doses of mRNA COVID-19 Vaccines. Eur Heart J Qual Care Clin Outcomes. 2021 Nov 26;qcab090. doi: 10.1093/ehjqcco/qcab090. Epub ahead of print. PMID: 34849667; PMCID: PMC8690190. <https://pubmed.ncbi.nlm.nih.gov/34849667/>
320. Tano E, San Martin S, Girgis S, et al. Perimyocarditis in Adolescents After Pfizer-BioNTech COVID-19 Vaccine. J Pediatric Infect Dis Soc. 2021 Nov 11;10(10):962-966. doi: 10.1093/jpids/piab060. PMID: 34319393; PMCID: PMC8344528. <https://pubmed.ncbi.nlm.nih.gov/34319393/>

321. Ambati S, Colon M, Mihic M, et al. Acute Myopericarditis after COVID-19 Vaccine in Teenagers. *Case Rep Cardiol.* 2021 Sep 20;2021:8268755. doi: 10.1155/2021/8268755. PMID: 34589238; PMCID: PMC8476255. <https://pubmed.ncbi.nlm.nih.gov/34589238/>
322. Ramírez-García A, Lozano Jiménez S, Darnaude Ximénez I, et al. Pericarditis tras la administración de la vacuna de ARNm BNT162b2 contra la COVID-19 [Pericarditis after administration of the BNT162b2 mRNA COVID-19 vaccine]. *Rev Esp Cardiol.* 2021 Dec;74(12):1121-1123. Spanish. doi: 10.1016/j.recesp.2021.06.006. Epub 2021 Jun 12. PMID: 34149145; PMCID: PMC8196309. <https://pubmed.ncbi.nlm.nih.gov/34149145/>
323. Ashaari S, Sohaib HA, Bolger K. A case report: symptomatic pericarditis post-COVID-19 vaccination. *Eur Heart J Case Rep.* 2021 Sep 24;5(10):ytav375. doi: 10.1093/ehjcr/ytav375. PMID: 34693198; PMCID: PMC8522432. <https://pubmed.ncbi.nlm.nih.gov/34693198/>.
324. Kaul R, Sreenivasan J, Goel A, et al. Myocarditis following COVID-19 vaccination. *Int J Cardiol Heart Vasc.* 2021 Oct;36:100872. doi: 10.1016/j.ijcha.2021.100872. Epub 2021 Sep 20. PMID: 34568540; PMCID: PMC8450283.. <https://www.ncbi.nlm.nih.gov/pubmed/34568540>
325. Khogali F, Abdelrahman R. Unusual Presentation of Acute Perimyocarditis Following SARS-COV-2 mRNA-1237 Moderna Vaccination. *Cureus.* 2021 Jul 23;13(7):e16590. doi: 10.7759/cureus.16590. PMID: 34447639; PMCID: PMC8381757.. <https://www.ncbi.nlm.nih.gov/pubmed/34447639>
326. Kim HW, Jenista ER, Wendell DC, et al. Patients With Acute Myocarditis Following mRNA COVID-19 Vaccination. *JAMA Cardiol.* 2021 Oct 1;6(10):1196-1201. doi: 10.1001/jamacardio.2021.2828. PMID: 34185046; PMCID: PMC8243258. <https://www.ncbi.nlm.nih.gov/pubmed/34185046>
327. Kim IC, Kim H, Lee HJ, et al. Cardiac Imaging of Acute Myocarditis Following COVID-19 mRNA Vaccination. *J Korean Med Sci.* 2021 Aug 16;36(32):e229. doi: 10.3346/jkms.2021.36.e229. PMID: 34402228; PMCID: PMC8369314.. <https://www.ncbi.nlm.nih.gov/pubmed/34402228>
328. King WW, Petersen MR, Matar RM, et al. Myocarditis following mRNA vaccination against SARS-CoV-2, a case series. *Am Heart J Plus.* 2021 Aug;8:100042. doi: 10.1016/j.ahjo.2021.100042. Epub 2021 Aug 9. PMID: 34396358; PMCID: PMC8349733. <https://www.ncbi.nlm.nih.gov/pubmed/34396358>
329. Witberg G, Barda N, Hoss S, et al. Myocarditis after Covid-19 Vaccination in a Large Health Care Organization. *N Engl J Med.* 2021 Dec 2;385(23):2132-2139. doi: 10.1056/NEJMoa2110737. Epub 2021 Oct 6. PMID: 34614329; PMCID: PMC8531986. <https://pubmed.ncbi.nlm.nih.gov/34614329/>

330. Chelala L, Jeudy J, Hossain R, et al. Cardiac MRI Findings of Myocarditis After COVID-19 mRNA Vaccination in Adolescents. *AJR Am J Roentgenol*. 2021 Oct 27. doi: 10.2214/AJR.21.26853. Epub ahead of print. PMID: 34704459. <https://www.ncbi.nlm.nih.gov/pubmed/34704459>
331. Choi S, Lee S, Seo JW, et al. Myocarditis-induced Sudden Death after BNT162b2 mRNA COVID-19 Vaccination in Korea: Case Report Focusing on Histopathological Findings. *J Korean Med Sci*. 2021 Oct 18;36(40):e286. doi: 10.3346/jkms.2021.36.e286. PMID: 34664804; PMCID: PMC8524235.. <https://www.ncbi.nlm.nih.gov/pubmed/34664804>
332. Chouchana L, Blet A, Al-Khalaf M, et al. Features of Inflammatory Heart Reactions Following mRNA COVID-19 Vaccination at a Global Level. *Clin Pharmacol Ther*. 2021 Dec 3. doi: 10.1002/cpt.2499. Epub ahead of print. PMID: 34860360.. <https://www.ncbi.nlm.nih.gov/pubmed/34860360>
333. Chua GT, Kwan MYW, Chui CSL, et al. Epidemiology of Acute Myocarditis/Pericarditis in Hong Kong Adolescents Following Comirnaty Vaccination. *Clin Infect Dis*. 2021 Nov 28:ciab989. doi: 10.1093/cid/ciab989. Epub ahead of print. PMID: 34849657; PMCID: PMC8767823. <https://www.ncbi.nlm.nih.gov/pubmed/34849657>
334. Clarke R, Ioannou A. Should T2 mapping be used in cases of recurrent myocarditis to differentiate between the acute inflammation and chronic scar? *J Pediatr*. 2021 Dec 18:S0022-3476(21)01232-4. doi: 10.1016/j.jpeds.2021.12.026. Epub ahead of print. PMID: 34933012. <https://www.ncbi.nlm.nih.gov/pubmed/34933012>
335. Colaneri M, De Filippo M, Licari A, et al. COVID vaccination and asthma exacerbation: might there be a link? *Int J Infect Dis*. 2021 Nov;112:243-246. doi: 10.1016/j.ijid.2021.09.026. Epub 2021 Sep 20. PMID: 34547487; PMCID: PMC8450144. <https://www.ncbi.nlm.nih.gov/pubmed/34547487>
336. Das BB, Kohli U, Ramachandran P, et al. Myopericarditis after messenger RNA Coronavirus Disease 2019 Vaccination in Adolescents 12 to 18 Years of Age. *J Pediatr*. 2021 Nov;238:26-32.e1. doi: 10.1016/j.jpeds.2021.07.044. Epub 2021 Jul 30. PMID: 34339728; PMCID: PMC8321962.. <https://www.ncbi.nlm.nih.gov/pubmed/34339728>
337. Das BB, Moskowitz WB, Taylor MB, Palmer A. Myocarditis and Pericarditis Following mRNA COVID-19 Vaccination: What Do We Know So Far? *Children (Basel)*. 2021 Jul 18;8(7):607. doi: 10.3390/children8070607. PMID: 34356586; PMCID: PMC8305058. <https://www.ncbi.nlm.nih.gov/pubmed/34356586>

338. Deb A, Abdelmalek J, Iwuji K, Nugent K. Acute Myocardial Injury Following COVID-19 Vaccination: A Case Report and Review of Current Evidence from Vaccine Adverse Events Reporting System Database. *J Prim Care Community Health*. 2021 Jan-Dec;12:21501327211029230. doi: 10.1177/21501327211029230. PMID: 34219532; PMCID: PMC8255555.. <https://www.ncbi.nlm.nih.gov/pubmed/34219532>
339. Dickey JB, Albert E, Badr M, et al. A Series of Patients With Myocarditis Following SARS-CoV-2 Vaccination With mRNA-1279 and BNT162b2. *JACC Cardiovasc Imaging*. 2021 Sep;14(9):1862-1863. doi: 10.1016/j.jcmg.2021.06.003. Epub 2021 Jun 16. PMID: 34246585; PMCID: PMC8219373.. <https://www.ncbi.nlm.nih.gov/pubmed/34246585>
340. Tutor A, Unis G, Ruiz B, Bolaji OA, et al. Spectrum of Suspected Cardiomyopathy Due to COVID-19: A Case Series. *Curr Probl Cardiol*. 2021 Oct;46(10):100926. doi: 10.1016/j.cpcardiol.2021.100926. Epub 2021 Jul 3. PMID: 34311983; PMCID: PMC8254392. <https://www.ncbi.nlm.nih.gov/pubmed/34311983>
341. Umei TC, Kishino Y, Shiraishi Y, et al. Recurrence of myopericarditis following mRNA COVID-19 vaccination in a male adolescent. *CJC Open*. 2021 Dec 9. doi: 10.1016/j.jco.2021.12.002. Epub ahead of print. PMID: 34904134; PMCID: PMC8656213. <https://www.ncbi.nlm.nih.gov/pubmed/34904134>
342. Vidula MK, Ambrose M, Glassberg H, Chokshi N, Chen T, Ferrari VA, Han Y. Myocarditis and Other Cardiovascular Complications of the mRNA-Based COVID-19 Vaccines. *Cureus*. 2021 Jun 10;13(6):e15576. doi: 10.7759/cureus.15576. PMID: 34277198; PMCID: PMC8270057. <https://www.ncbi.nlm.nih.gov/pubmed/34277198>
343. Visclosky T, Theyyunni N, Klekowski N, Bradin S. Myocarditis Following mRNA COVID-19 Vaccine. *Pediatr Emerg Care*. 2021 Nov 1;37(11):583-584. doi: 10.1097/PEC.0000000000002557. PMID: 34731877. <https://www.ncbi.nlm.nih.gov/pubmed/34731877>
344. Warren CM, Snow TT, Lee AS, Shah MM, et al.. Assessment of Allergic and Anaphylactic Reactions to mRNA COVID-19 Vaccines With Confirmatory Testing in a US Regional Health System. *JAMA Netw Open*. 2021 Sep 1;4(9):e2125524. doi: 10.1001/jamanetworkopen.2021.25524. PMID: 34533570; PMCID: PMC8449279. <https://www.ncbi.nlm.nih.gov/pubmed/34533570>
345. Watkins K, Griffin G, Septaric K, Simon EL. Myocarditis after BNT162b2 vaccination in a healthy male. *Am J Emerg Med*. 2021 Dec;50:815.e1-815.e2. doi: 10.1016/j.ajem.2021.06.051. Epub 2021 Jun 29. PMID: 34229940; PMCID: PMC8238643. <https://www.ncbi.nlm.nih.gov/pubmed/34229940>

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346. Porres-Aguilar M, Lazo-Langner A, Panduro A, et al. COVID-19 vaccine-induced immune thrombotic thrombocytopenia: An emerging cause of splanchnic vein thrombosis. *Ann Hepatol.* 2021 Jul-Aug;23:100356. doi: 10.1016/j.aohep.2021.100356. Epub 2021 Apr 30. PMID: 33940219; PMCID: PMC8086259. <https://www.sciencedirect.com/science/article/pii/S1665268121000557>
347. Aladdin Y, Algahtani H, Shirah Bader. Vaccine-Induced immune thrombotic thrombocytopenia with Disseminated intravascular coagulation and Death following ChadOx1 nCov-19 Vaccine. *Journal of Stroke and Cerebrovascular Diseases.* September 202130 (9), <https://www.sciencedirect.com/science/article/pii/S1052305721003414> 3
348. Iba T, Levy JH. The roles of platelets in COVID-19-associated coagulopathy and vaccine-induced immune thrombotic thrombocytopenia. *Trends Cardiovasc Med.* 2022 Jan;32(1):1-9. doi: 10.1016/j.tcm.2021.08.012. Epub 2021 Aug 27. PMID: 34455073; PMCID: PMC8390120. <https://www.sciencedirect.com/science/article/pii/S1050173821000967>
349. Cines DB, Bussel JB. SARS-CoV-2 Vaccine-Induced Immune Thrombotic Thrombocytopenia. *N Engl J Med.* 2021 Jun 10;384(23):2254-2256. doi: 10.1056/NEJMe2106315. Epub 2021 Apr 16. Erratum in: *N Engl J Med.* 2021 Jun 10;384(23):e92. PMID: 33861524; PMCID: PMC8063912. <https://www.nejm.org/doi/full/10.1056/nejme2106315>
350. Welsh KJ, Baumblatt J, Chege W, et al. Thrombocytopenia including immune thrombocytopenia after receipt of mRNA COVID-19 vaccines reported to the Vaccine Adverse Event Reporting System (VAERS). *Vaccine.* 2021 Jun 8;39(25):3329-3332. doi: 10.1016/j.vaccine.2021.04.054. Epub 2021 Apr 30. PMID: 34006408; PMCID: PMC8086806. <https://www.sciencedirect.com/science/article/pii/S0264410X21005247>
351. Varona JF, García-Isidro M, Moeinvaziri M, et al. Primary adrenal insufficiency associated with Oxford-AstraZeneca ChAdOx1 nCoV-19 vaccine-induced immune thrombotic thrombocytopenia (VITT). *Eur J Intern Med.* 2021 Sep;91:90-92. doi: 10.1016/j.ejim.2021.06.025. Epub 2021 Jul 10. PMID: 34256983; PMCID: PMC8271354. <https://www.sciencedirect.com/science/article/pii/S0953620521002363>
352. McGonagle D, De Marco G, Bridgewood C. Mechanisms of Immunothrombosis in Vaccine-Induced Thrombotic Thrombocytopenia (VITT) Compared to Natural SARS-CoV-2 Infection. *J Autoimmun.* 2021 Jul;121:102662. doi: 10.1016/j.jaut.2021.102662. Epub 2021 May 19. PMID: 34051613; PMCID: PMC8133385. <https://www.sciencedirect.com/science/article/abs/pii/S0896841121000706>

353. Tiede A, Sachs UJ, Czwalińska A, et al. Prothrombotic immune thrombocytopenia after COVID-19 vaccination. *Blood*. 2021 Jul 29;138(4):350-353. doi: 10.1182/blood.2021011958. PMID: 34323939; PMCID: PMC8084604. <https://www.sciencedirect.com/science/article/pii/S0006497121009411>
354. Tsilingiris D, Vallianou NG, Karampela I, et al. Vaccine induced thrombotic thrombocytopenia: The shady chapter of a success story. *Metabol Open*. 2021 Sep;11:100101. doi: 10.1016/j.metop.2021.100101. Epub 2021 Jun 18. PMID: 34179744; PMCID: PMC8217988. <https://www.sciencedirect.com/science/article/pii/S2589936821000256>
355. Paulsen FO, Schaefer C, et al. Immune thrombocytopenic purpura after vaccination with COVID-19 vaccine (ChAdOx1 nCov-19). *Blood*. 2021 Sep 16;138(11):996-999. doi: 10.1182/blood.2021012790. PMID: 34297792; PMCID: PMC8313798. <https://www.sciencedirect.com/science/article/abs/pii/S0006497121013963>.
356. De Cristofaro R, Sanguinetti M. Vaccine-induced thrombotic thrombocytopenia, a rare but severe case of friendly fire in the battle against COVID-19 pandemic: What pathogenesis? *Eur J Intern Med*. 2021 Sep;91:88-89. doi: 10.1016/j.ejim.2021.06.020. Epub 2021 Jun 29. PMID: 34244023; PMCID: PMC8238658. <https://www.sciencedirect.com/science/article/pii/S0953620521002314>
357. Lee EJ, Cines DB, Gernsheimer T, et al. Thrombocytopenia following Pfizer and Moderna SARS-CoV-2 vaccination. *Am J Hematol*. 2021 May 1;96(5):534-537. doi: 10.1002/ajh.26132. Epub 2021 Mar 9. PMID: 33606296; PMCID: PMC8014568. <https://pubmed.ncbi.nlm.nih.gov/33606296/>
358. Helms JM, Ansteatt KT, Roberts JC, et al. Severe, Refractory Immune Thrombocytopenia Occurring After SARS-CoV-2 Vaccine. *J Blood Med*. 2021 Apr 6;12:221-224. doi: 10.2147/JBM.S307047. PMID: 33854395; PMCID: PMC8040692. <https://pubmed.ncbi.nlm.nih.gov/33854395/>
359. Malayala SV, Mohan G, Vasireddy D, Atluri P. Purpuric Rash and Thrombocytopenia After the mRNA-1273 (Moderna) COVID-19 Vaccine. *Cureus*. 2021;13(3):e14099. Published 2021 Mar 25. doi:10.7759/cureus.14099 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7996471/>
360. Kuter DJ. Exacerbation of immune thrombocytopenia following COVID-19 vaccination. *Br J Haematol*. 2021 Nov;195(3):365-370. doi: 10.1111/bjh.17645. Epub 2021 Jun 24. PMID: 34075578; PMCID: PMC8239625. <https://pubmed.ncbi.nlm.nih.gov/34075578/>
361. de Bruijn S, Maes MB, De Waele L, et al. First report of a de novo iTTP episode associated with an mRNA-based anti-COVID-19 vaccination. *J Thromb Haemost*. 2021

- Aug;19(8):2014-2018. doi: 10.1111/jth.15418. Epub 2021 Jul 5. PMID: 34105244; PMCID: PMC8236927. <https://pubmed.ncbi.nlm.nih.gov/34105244/>
362. Vayne C, Rollin J, Gruel Y, et al. PF4 Immunoassays in Vaccine-Induced Thrombotic Thrombocytopenia. *N Engl J Med*. 2021 Jul 22;385(4):376-378. doi: 10.1056/NEJMc2106383. Epub 2021 May 19. PMID: 34010527; PMCID: PMC8174029. <https://www.nejm.org/doi/full/10.1056/NEJMc2106383>
 363. Huynh A, Kelton JG, Arnold DM, et al. Antibody epitopes in vaccine-induced immune thrombotic thrombocytopenia. *Nature*. 2021 Aug;596(7873):565-569. doi: 10.1038/s41586-021-03744-4. Epub 2021 Jul 7. PMID: 34233346. <https://www.nature.com/articles/s41586-021-03744-4>
 364. Akiyama H, Kakiuchi S, Rikitake J, et al. Immune thrombocytopenia associated with Pfizer-BioNTech's BNT162b2 mRNA COVID-19 vaccine. *IDCases*. 2021;25:e01245. doi: 10.1016/j.idcr.2021.e01245. Epub 2021 Aug 4. PMID: 34381692; PMCID: PMC8336989. <https://www.sciencedirect.com/science/article/pii/S2214250921002018>.
 365. Franchini M, Liumbruno GM, Pezzo M. COVID-19 vaccine-associated immune thrombosis and thrombocytopenia (VITT): Diagnostic and therapeutic recommendations for a new syndrome. *Eur J Haematol*. 2021 Aug;107(2):173-180. doi: 10.1111/ejh.13665. Epub 2021 Jun 9. PMID: 33987882; PMCID: PMC8239516. <https://pubmed.ncbi.nlm.nih.gov/33987882/>
 366. Favaloro EJ. Laboratory testing for suspected COVID-19 vaccine-induced (immune) thrombotic thrombocytopenia. *Int J Lab Hematol*. 2021 Aug;43(4):559-570. doi: 10.1111/ijlh.13629. Epub 2021 Jun 17. PMID: 34138513; PMCID: PMC8444734. <https://pubmed.ncbi.nlm.nih.gov/34138513/>
 367. Hippisley-Cox J, Patone M, Mei XW, et al. Risk of thrombocytopenia and thromboembolism after covid-19 vaccination and SARS-CoV-2 positive testing: self-controlled case series study. *BMJ*. 2021 Aug 26;374:n1931. doi: 10.1136/bmj.n1931. PMID: 34446426; PMCID: PMC8388189. <https://pubmed.ncbi.nlm.nih.gov/34446426/>
 368. Sharifian-Dorche M, Bahmanyar M, Sharifian-Dorche A, et al. Vaccine-induced immune thrombotic thrombocytopenia and cerebral venous sinus thrombosis post COVID-19 vaccination; a systematic review. *J Neurol Sci*. 2021 Sep 15;428:117607. doi: 10.1016/j.jns.2021.117607. Epub 2021 Aug 3. PMID: 34365148; PMCID: PMC8330139. <https://pubmed.ncbi.nlm.nih.gov/34365148/>.

369. Varona JF, García-Isidro M, Moeinvaziri M, et al. Primary adrenal insufficiency associated with Oxford-AstraZeneca ChAdOx1 nCoV-19 vaccine-induced immune thrombotic thrombocytopenia (VITT). *Eur J Intern Med*. 2021 Sep;91:90-92. doi: 10.1016/j.ejim.2021.06.025. Epub 2021 Jul 10. PMID: 34256983; PMCID: PMC8271354. <https://pubmed.ncbi.nlm.nih.gov/34256983/>
370. Dutta A, Ghosh R, Bhattacharya D, et al. Anti-PF4 antibody negative cerebral venous sinus thrombosis without thrombocytopenia following immunization with COVID-19 vaccine in an elderly non-comorbid Indian male, managed with conventional heparin-warfarin based anticoagulation. *Diabetes Metab Syndr*. 2021 Jul-Aug;15(4):102184. doi: 10.1016/j.dsx.2021.06.021. Epub 2021 Jun 24. PMID: 34186376; PMCID: PMC8223002. <https://pubmed.ncbi.nlm.nih.gov/34186376/>
371. Zakaria Z, Sapiai NA, Ghani ARI. Cerebral venous sinus thrombosis 2 weeks after the first dose of mRNA SARS-CoV-2 vaccine. *Acta Neurochir (Wien)*. 2021 Aug;163(8):2359-2362. doi: 10.1007/s00701-021-04860-w. Epub 2021 Jun 8. PMID: 34101024; PMCID: PMC8186353. <https://pubmed.ncbi.nlm.nih.gov/34101024/>
372. Tølbøll Sørensen AL, Rolland M, Hartmann J, et al. A case of thrombocytopenia and multiple thromboses after vaccination with ChAdOx1 nCoV-19 against SARS-CoV-2. *Blood Adv*. 2021 Jun 22;5(12):2569-2574. doi: 10.1182/bloodadvances.2021004904. PMID: 34137813; PMCID: PMC8219289. <https://pubmed.ncbi.nlm.nih.gov/34137813/>
373. Marcucci R, Marietta M. Vaccine-induced thrombotic thrombocytopenia: the elusive link between thrombosis and adenovirus-based SARS-CoV-2 vaccines. *Intern Emerg Med*. 2021 Aug;16(5):1113-1119. doi: 10.1007/s11739-021-02793-x. Epub 2021 Jun 30. PMID: 34191218; PMCID: PMC8243058. <https://pubmed.ncbi.nlm.nih.gov/34191218/>
374. Costentin G, Ozkul-Wermester O, Triquenot A, et al. Acute Ischemic Stroke Revealing ChAdOx1 nCov-19 Vaccine-Induced Immune Thrombotic Thrombocytopenia: Impact on Recanalization Strategy. *J Stroke Cerebrovasc Dis*. 2021 Sep;30(9):105942. doi: 10.1016/j.jstrokecerebrovasdis.2021.105942. Epub 2021 Jun 24. PMID: 34175640. <https://pubmed.ncbi.nlm.nih.gov/34175640/>
375. Varona JF, García-Isidro M, Moeinvaziri M, et al. Primary adrenal insufficiency associated with Oxford-AstraZeneca ChAdOx1 nCoV-19 vaccine-induced immune thrombotic thrombocytopenia (VITT). *Eur J Intern Med*. 2021 Sep;91:90-92. doi: 10.1016/j.ejim.2021.06.025. Epub 2021 Jul 10. PMID: 34256983; PMCID: PMC8271354. <https://pubmed.ncbi.nlm.nih.gov/34256983/>
376. Kragholm K, Sessa M, Mulvad T, et al. Thrombocytopenia after COVID-19 vaccination. *J Autoimmun*. 2021 Sep;123:102712. doi: 10.1016/j.jaut.2021.102712. Epub 2021 Jul 27. PMID: 34332437; PMCID: PMC8313538. <https://pubmed.ncbi.nlm.nih.gov/34332437/>

377. Tarawneh O, Tarawneh H. Immune thrombocytopenia in a 22-year-old post Covid-19 vaccine. *Am J Hematol.* 2021 May 1;96(5):E133-E134. doi: 10.1002/ajh.26106. Epub 2021 Feb 11. PMID: 33476455; PMCID: PMC8014773. <https://pubmed.ncbi.nlm.nih.gov/33476455/>
378. Koch M, Fuld S, Middeke JM, et al. Secondary Immune Thrombocytopenia (ITP) Associated with ChAdOx1 Covid-19 Vaccination - A Case Report. *TH Open.* 2021 Jul 30;5(3):e315-e318. doi: 10.1055/s-0041-1731774. PMID: 34377889; PMCID: PMC8324423. <https://pubmed.ncbi.nlm.nih.gov/34377889/>
379. Schulz JB, Berlit P, Diener HC, et al. COVID-19 Vaccine-Associated Cerebral Venous Thrombosis in Germany. *Ann Neurol.* 2021 Oct;90(4):627-639. doi: 10.1002/ana.26172. Epub 2021 Aug 23. PMID: 34288044; PMCID: PMC8427115. <https://pubmed.ncbi.nlm.nih.gov/34288044/>
380. De Michele M, Iacobucci M, Chistolini A, et al. Malignant cerebral infarction after ChAdOx1 nCov-19 vaccination: a catastrophic variant of vaccine-induced immune thrombotic thrombocytopenia. *Nat Commun.* 2021 Aug 2;12(1):4663. doi: 10.1038/s41467-021-25010-x. PMID: 34341358; PMCID: PMC8329262. <https://pubmed.ncbi.nlm.nih.gov/34341358/>
381. Akiyama H, Kakiuchi S, Rikitake J, et al. Immune thrombocytopenia associated with Pfizer-BioNTech's BNT162b2 mRNA COVID-19 vaccine. *IDCases.* 2021;25:e01245. doi: 10.1016/j.idcr.2021.e01245. Epub 2021 Aug 4. PMID: 34381692; PMCID: PMC8336989. <https://www.sciencedirect.com/science/article/pii/S2214250921002018>
382. Fueyo-Rodriguez O, Valente-Acosta B, Jimenez-Soto R, et al. Secondary immune thrombocytopenia supposedly attributable to COVID-19 vaccination. *BMJ Case Rep.* 2021 May 31;14(5):e242220. doi: 10.1136/bcr-2021-242220. PMID: 34059544; PMCID: PMC8169472. <https://casereports.bmj.com/content/14/5/e242220.abstract>.
383. Ganzel C, Ben-Chetrit E. Immune Thrombocytopenia Following the Pfizer-BioNTech BNT162b2 mRNA COVID-19 Vaccine. *Isr Med Assoc J.* 2021 Jun;23(6):341. PMID: 34155844. <https://pubmed.ncbi.nlm.nih.gov/34155844/>
384. Idogun PO, Ward MC, Teklie Y, et al. Newly Diagnosed Idiopathic Thrombocytopenia Post COVID-19 Vaccine Administration. *Cureus.* 2021;13(5):e14853. Published 2021 May 5. doi:10.7759/cureus.14853 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8176657/>.
385. Julian JA, Mathern DR, Fernando D. Idiopathic Thrombocytopenic Purpura and the Moderna Covid-19 Vaccine. *Ann Emerg Med.* 2021 Jun;77(6):654-656. doi: 10.1016/j.annemergmed.2021.02.011. Epub 2021 Feb 12. PMID: 34030782; PMCID: PMC7879100. [https://www.annemergmed.com/article/S0196-0644\(21\)00122-0/fulltext](https://www.annemergmed.com/article/S0196-0644(21)00122-0/fulltext).

386. Lee EJ, Cines DB, Gernsheimer T, et al. Thrombocytopenia following Pfizer and Moderna SARS-CoV-2 vaccination. *Am J Hematol*. 2021;96(5):534-537. doi:10.1002/ajh.26132 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8014568/>.
387. Hines A, Shen JG, Olazagasti C, Shams S. Immune thrombocytopenic purpura and acute liver injury after COVID-19 vaccine. *BMJ Case Rep*. 2021 Jul 30;14(7):e242678. doi: 10.1136/bcr-2021-242678. PMID: 34330722; PMCID: PMC8327821. <https://casereports.bmj.com/content/14/7/e242678>.
388. Portuguese AJ, Sunga C, Kruse-Jarres R, et al. Autoimmune- and complement-mediated hematologic condition recrudescence following SARS-CoV-2 vaccination. *Blood Adv*. 2021 Jul 13;5(13):2794-2798. doi: 10.1182/bloodadvances.2021004957. PMID: 34255033; PMCID: PMC8276576. <https://ashpublications.org/bloodadvances/article/5/13/2794/476324/Autoimmune-and-complement-mediated-hematologic>
389. Monagle P, Ng AP, Linden M, et al. Vaccine-induced immune thrombosis and thrombocytopenia syndrome following adenovirus-vectored severe acute respiratory syndrome coronavirus 2 vaccination: a novel hypothesis regarding mechanisms and implications for future vaccine development. *Immunol Cell Biol*. 2021 Nov;99(10):1006-1010. doi: 10.1111/imcb.12505. Epub 2021 Oct 18. PMID: 34664303; PMCID: PMC8652900. <https://pubmed.ncbi.nlm.nih.gov/34664303/>
390. Welsh KJ, Baumblatt J, Chege W, Goud R, Nair N. Thrombocytopenia including immune thrombocytopenia after receipt of mRNA COVID-19 vaccines reported to the Vaccine Adverse Event Reporting System (VAERS). *Vaccine*. 2021 Jun 8;39(25):3329-3332. doi: 10.1016/j.vaccine.2021.04.054. Epub 2021 Apr 30. PMID: 34006408; PMCID: PMC8086806. <https://www.ncbi.nlm.nih.gov/pubmed/34006408>
391. Flower L, Bares Z, Santiapillai G, et al. Acute ST-segment elevation myocardial infarction secondary to vaccine-induced immune thrombosis with thrombocytopaenia (VITT). *BMJ Case Rep*. 2021 Sep 27;14(9):e245218. doi: 10.1136/bcr-2021-245218. PMID: 34580132; PMCID: PMC8477249. <https://pubmed.ncbi.nlm.nih.gov/34580132/>.
392. Asmat H, Fayeye F, Alshakaty H, Patel J. A rare case of COVID-19 vaccine-induced thrombotic thrombocytopaenia (VITT) involving the veno-splanchnic and pulmonary arterial circulation, from a UK district general hospital. *BMJ Case Rep*. 2021 Sep 17;14(9):e244223. doi: 10.1136/bcr-2021-244223. PMID: 34535492; PMCID: PMC8451313. <https://pubmed.ncbi.nlm.nih.gov/34535492/>
393. Alalwan AA, Abou Trabeh A, Premchandran D, et al. COVID-19 Vaccine-Induced Thrombotic Thrombocytopenia: A Case Series. *Cureus*. 2021 Sep 10;13(9):e17862. doi: 10.7759/cureus.17862. PMID: 34527501; PMCID: PMC8432416. <https://pubmed.ncbi.nlm.nih.gov/34527501/>

394. MacIntyre CR, Veness B, Berger D, et al. Thrombosis with Thrombocytopenia Syndrome (TTS) following AstraZeneca ChAdOx1 nCoV-19 (AZD1222) COVID-19 vaccination - A risk-benefit analysis for people < 60 years in Australia. *Vaccine*. 2021 Aug 9;39(34):4784-4787. doi: 10.1016/j.vaccine.2021.07.013. Epub 2021 Jul 10. PMID: 34272095; PMCID: PMC8270740. <https://pubmed.ncbi.nlm.nih.gov/34272095/>
395. Gordon SF, Clothier HJ, Morgan H, et al. Immune thrombocytopenia following immunisation with Vaxzevria ChadOx1-S (AstraZeneca) vaccine, Victoria, Australia. *Vaccine*. 2021 Nov 26;39(48):7052-7057. doi: 10.1016/j.vaccine.2021.10.030. Epub 2021 Oct 30. PMID: 34756770; PMCID: PMC8556135. <https://pubmed.ncbi.nlm.nih.gov/34756770/>
396. Welsh KJ, Baumblatt J, Chege W, et al. Thrombocytopenia including immune thrombocytopenia after receipt of mRNA COVID-19 vaccines reported to the Vaccine Adverse Event Reporting System (VAERS). *Vaccine*. 2021 Jun 8;39(25):3329-3332. doi: 10.1016/j.vaccine.2021.04.054. Epub 2021 Apr 30. PMID: 34006408; PMCID: PMC8086806. <https://pubmed.ncbi.nlm.nih.gov/34006408/>
397. Jasaraj RB, Shrestha DB, Gaire S, et al. Immune Thrombocytopenic Purpura Following Pfizer-BioNTech COVID-19 Vaccine in an Elderly Female. *Cureus*. 2021 Aug 4;13(8):e16871. doi: 10.7759/cureus.16871. PMID: 34513446; PMCID: PMC8414938. <https://pubmed.ncbi.nlm.nih.gov/34513446/>
398. Scavone M, Clerici B, Biocchi S, et al. Platelet activation and modulation in thrombosis with thrombocytopenia syndrome associated with ChAdOx1 nCov-19 vaccine. *Haematologica*. 2021 Dec 1;106(12):3228-3231. doi: 10.3324/haematol.2021.279345. PMID: 34474550; PMCID: PMC8634168. <https://pubmed.ncbi.nlm.nih.gov/34474550/>
399. Malayala SV, Papudesi BN, Sharma R, et al. A Case of Idiopathic Thrombocytopenic Purpura After Booster Dose of BNT162b2 (Pfizer-Biontech) COVID-19 Vaccine. *Cureus*. 2021 Oct 23;13(10):e18985. doi: 10.7759/cureus.18985. PMID: 34820240; PMCID: PMC8607313. <https://pubmed.ncbi.nlm.nih.gov/34820240/>
400. Abou-Ismaïl MY, Moser KA, Smock KJ, et al. Vaccine-induced thrombotic thrombocytopenia following Ad26.COV2.S vaccine in a man presenting as acute venous thromboembolism. *Am J Hematol*. 2021 Sep 1;96(9):E346-E349. doi: 10.1002/ajh.26265. Epub 2021 Jun 17. PMID: 34096082; PMCID: PMC8212083. <https://pubmed.ncbi.nlm.nih.gov/34096082/>

Antiphospholipid Antibodies

401. Talotta R, Robertson ES. Antiphospholipid antibodies and risk of post-COVID-19 vaccination thrombophilia: The straw that breaks the camel's back? Cytokine Growth Factor Rev. 2021 Aug;60:52-60. doi: 10.1016/j.cytogfr.2021.05.001. Epub 2021 May 28. PMID: 34090785; PMCID: PMC8159713.: <https://docs.google.com/document/d/1Xzajao8VMMnC3CdxSBKks1o7kiOLXFQ>

Rhabdomyolysis

402. Faissner S, Richter D, Ceylan U, et al. COVID-19 mRNA vaccine induced rhabdomyolysis and fasciitis. J Neurol. 2021 Aug 25:1–2. doi: 10.1007/s00415-021-10768-3. Epub ahead of print. PMID: 34435250; PMCID: PMC8386679. <https://pubmed.ncbi.nlm.nih.gov/34435250/>
403. Nassar M, Chung H, Dhayaparan Y, et al. COVID-19 vaccine induced rhabdomyolysis: Case report with literature review. Diabetes Metab Syndr. 2021 Jul-Aug;15(4):102170. doi: 10.1016/j.dsx.2021.06.007. Epub 2021 Jun 15. PMID: 34186348; PMCID: PMC8205294. <https://pubmed.ncbi.nlm.nih.gov/34186348/>.
404. Nassar M, Chung H, Dhayaparan Y, et al. COVID-19 vaccine induced rhabdomyolysis: Case report with literature review. Diabetes Metab Syndr. 2021 Jul-Aug;15(4):102170. doi: 10.1016/j.dsx.2021.06.007. Epub 2021 Jun 15. PMID: 34186348; PMCID: PMC8205294. <https://www.sciencedirect.com/science/article/pii/S1871402121001880>

Guillain Barre Syndrome

405. Dufour C, Co TK, Liu A. GM1 ganglioside antibody and COVID-19 related Guillain Barre Syndrome - A case report, systemic review and implication for vaccine development. Brain Behav Immun Health. 2021 Mar;12:100203. doi: 10.1016/j.bbih.2021.100203. Epub 2021 Jan 13. PMID: 33462567; PMCID: PMC7805391. <https://www.sciencedirect.com/science/article/pii/S2666354621000065>
406. Introna A, Caputo F, Santoro C, et al. Guillain-Barré syndrome after AstraZeneca COVID-19-vaccination: A causal or casual association? Clin Neurol Neurosurg. 2021 Sep;208:106887. doi: 10.1016/j.clineuro.2021.106887. Epub 2021 Aug 13. PMID: 34418708; PMCID: PMC8360997. <https://www.sciencedirect.com/science/article/pii/S0303846721004169>

407. Min YG, Ju W, Ha YE, et al. Sensory Guillain-Barre syndrome following the ChAdOx1 nCov-19 vaccine: Report of two cases and review of literature. *J Neuroimmunol*. 2021 Oct 15;359:577691. doi: 10.1016/j.jneuroim.2021.577691. Epub 2021 Aug 8. PMID: 34416410; PMCID: PMC8349403. <https://www.sciencedirect.com/science/article/pii/S0165572821002186>
408. Ogbebor O, Seth H, Min Z, et al. Guillain-Barré syndrome following the first dose of SARS-CoV-2 vaccine: A temporal occurrence, not a causal association. *IDCases*. 2021;24:e01143. doi: 10.1016/j.idcr.2021.e01143. Epub 2021 Apr 30. PMID: 33968610; PMCID: PMC8086372. <https://www.sciencedirect.com/science/article/pii/S2214250921000998>.
409. Rossetti A, Gheihman G, O'Hare M, et al. Guillain-Barré Syndrome Presenting as Facial Diplegia after COVID-19 Vaccination: A Case Report. *J Emerg Med*. 2021 Dec;61(6):e141-e145. doi: 10.1016/j.jemermed.2021.07.062. Epub 2021 Aug 7. PMID: 34538679; PMCID: PMC8346349. <https://www.sciencedirect.com/science/article/pii/S0736467921006442>
410. Theuriet J, Richard C, Becker J, et al. Guillain-Barré syndrome following first injection of ChAdOx1 nCoV-19 vaccine: First report. *Rev Neurol (Paris)*. 2021 Dec;177(10):1305-1307. doi: 10.1016/j.neurol.2021.04.005. Epub 2021 Jun 24. PMID: 34217513. <https://www.sciencedirect.com/science/article/pii/S0035378721005853>.
411. Finsterer J. SARS-CoV-2 vaccinations are unsafe for those experiencing post-vaccination Guillain-Barre syndrome. *Ann Med Surg (Lond)*. 2021 Aug;68:102584. doi: 10.1016/j.amsu.2021.102584. Epub 2021 Jul 19. PMID: 34306673; PMCID: PMC8288229. <https://www.sciencedirect.com/science/article/pii/S2049080121005343>
412. Christensen SK, Ballegaard M, Boesen MS. [Guillain Barré syndrome after mRNA-1273 vaccination against COVID-19]. *Ugeskr Laeger*. 2021 Aug 30;183(35):V05210455. Danish. PMID: 34477091. <https://pubmed.ncbi.nlm.nih.gov/34477091/>
413. Oo WM, Giri P, de Souza A. AstraZeneca COVID-19 vaccine and Guillain- Barré Syndrome in Tasmania: A causal link? *J Neuroimmunol*. 2021 Nov 15;360:577719. doi: 10.1016/j.jneuroim.2021.577719. Epub 2021 Sep 17. PMID: 34560365; PMCID: PMC8447540. <https://pubmed.ncbi.nlm.nih.gov/34560365/>
414. Aomar-Millán IF, Martínez de Victoria-Carazo J, Peregrina-Rivas JA, et al. COVID-19, Guillain-Barré y vacuna. Una mezcla peligrosa [COVID-19, Guillain-Barré syndrome, and the vaccine. A dangerous combination]. *Rev Clin Esp*. 2021 Nov;221(9):555-557. Spanish. doi: 10.1016/j.rce.2021.05.005. Epub 2021 Jun 5. PMID: 34108736; PMCID: PMC8179060. <https://pubmed.ncbi.nlm.nih.gov/34108736/>.

415. Bouattour N, Hdiji O, Sakka S, et al. Guillain-Barré syndrome following the first dose of Pfizer-BioNTech COVID-19 vaccine: case report and review of reported cases. *Neurol Sci.* 2022 Feb;43(2):755-761. doi: 10.1007/s10072-021-05733-x. Epub 2021 Nov 18. PMID: 34796417; PMCID: PMC8601771. <https://pubmed.ncbi.nlm.nih.gov/34796417/>.
416. Trimboli M, Zoleo P, Arabia G, et al. Guillain-Barré syndrome following BNT162b2 COVID-19 vaccine. *Neurol Sci.* 2021 Nov;42(11):4401-4402. doi: 10.1007/s10072-021-05523-5. Epub 2021 Aug 4. PMID: 34346014; PMCID: PMC8331323. <https://link.springer.com/article/10.1007%2Fs10072-021-05523-5>.
417. Pegat A, Vogrig A, Khouri C, et al. Adenovirus COVID-19 Vaccines and Guillain-Barré Syndrome with Facial Paralysis. *Ann Neurol.* 2022 Jan;91(1):162-163. doi: 10.1002/ana.26258. Epub 2021 Nov 12. PMID: 34699065; PMCID: PMC8652690. <https://onlinelibrary.wiley.com/doi/10.1002/ana.26258>.
418. Woo EJ, Mba-Jonas A, Dimova RB, et al. Association of Receipt of the Ad26.COV2.S COVID-19 Vaccine With Presumptive Guillain-Barré Syndrome, February-July 2021. *JAMA.* 2021 Oct 26;326(16):1606-1613. doi: 10.1001/jama.2021.16496. PMID: 34617967; PMCID: PMC8498927. <https://jamanetwork.com/journals/jama/fullarticle/2785009>
419. Rao SJ, Khurana S, Murthy G, et al. A case of Guillain-Barre syndrome following Pfizer COVID-19 vaccine. *J Community Hosp Intern Med Perspect.* 2021 Sep 20;11(5):597-600. doi: 10.1080/20009666.2021.1954284. PMID: 34567447; PMCID: PMC8462911. <https://pubmed.ncbi.nlm.nih.gov/34567447/>
420. Shao SC, Wang CH, Chang KC, et al. Guillain-Barré Syndrome Associated with COVID-19 Vaccination. *Emerg Infect Dis.* 2021 Dec;27(12):3175-3178. doi: 10.3201/eid2712.211634. Epub 2021 Oct 14. PMID: 34648420; PMCID: PMC8632191. <https://pubmed.ncbi.nlm.nih.gov/34648420/>.
421. Shapiro Ben David S, Potasman I, et al. Rate of Recurrent Guillain-Barré Syndrome After mRNA COVID-19 Vaccine BNT162b2. *JAMA Neurol.* 2021 Nov 1;78(11):1409-1411. doi: 10.1001/jamaneurol.2021.3287. PMID: 34468703; PMCID: PMC8411356. <https://jamanetwork.com/journals/jamaneurology/fullarticle/2783708>
422. Malamud E, Otallah SI, Caress JB, Lapid DJ. Guillain-Barré Syndrome After COVID-19 Vaccination in an Adolescent. *Pediatr Neurol.* 2022 Jan;126:9-10. doi: 10.1016/j.pediatrneurol.2021.10.003. Epub 2021 Oct 8. Erratum in: *Pediatr Neurol.* 2021 Dec 10;: PMID: 34717201; PMCID: PMC8498800. [https://www.pedneur.com/article/S0887-8994\(21\)00221-6/fulltext](https://www.pedneur.com/article/S0887-8994(21)00221-6/fulltext).
423. Maramattom BV, Krishnan P, Paul R, et al. Guillain-Barré Syndrome following ChAdOx1-S/nCoV-19 Vaccine. *Ann Neurol.* 2021 Aug;90(2):312-314. doi: 10.1002/ana.26143. Epub 2021 Jun 22. PMID: 34114256. <https://pubmed.ncbi.nlm.nih.gov/34114256/>.

424. Masuccio FG, Comi C, Solaro C. Guillain-Barré syndrome following COVID-19 vaccine mRNA-1273: a case report. *Acta Neurol Belg*. 2021 Nov 12;1–3. doi: 10.1007/s13760-021-01838-4. Epub ahead of print. PMID: 34767184; PMCID: PMC8586608. <https://pubmed.ncbi.nlm.nih.gov/34767184/>.
425. Finsterer J, Scorza FA, Scorza CA. Post SARS-CoV-2 vaccination Guillain-Barre syndrome in 19 patients. *Clinics (Sao Paulo)*. 2021 Oct 11;76:e3286. doi: 10.6061/clinics/2021/e3286. PMID: 34644738; PMCID: PMC8478139. <https://pubmed.ncbi.nlm.nih.gov/34644738/>.
426. Kanabar G, Wilkinson P. Guillain-Barré syndrome presenting with facial diplegia following COVID-19 vaccination in two patients. *BMJ Case Rep*. 2021 Oct 14;14(10):e244527. doi: 10.1136/bcr-2021-244527. PMID: 34649856; PMCID: PMC8522664. <https://pubmed.ncbi.nlm.nih.gov/34649856/>
427. Kripalani Y, Lakkappan V, Parulekar L, et al. A Rare Case of Guillain-Barré Syndrome following COVID-19 Vaccination. *Eur J Case Rep Intern Med*. 2021 Sep 14;8(9):002707. doi: 10.12890/2021_002797. PMID: 34671572; PMCID: PMC8523377. <https://pubmed.ncbi.nlm.nih.gov/34671572/>
428. Waheed S, Bayas A, Hindi F, et al. Neurological Complications of COVID-19: Guillain-Barre Syndrome Following Pfizer COVID-19 Vaccine. *Cureus*. 2021 Feb 18;13(2):e13426. doi: 10.7759/cureus.13426. PMID: 33758714; PMCID: PMC7978140. <https://pubmed.ncbi.nlm.nih.gov/33758714/>
429. Matarneh AS, Al-Battah AH, Farooqui K, et al. COVID-19 vaccine causing Guillain-Barre syndrome, a rare potential side effect. *Clin Case Rep*. 2021 Aug 30;9(9):e04756. doi: 10.1002/ccr3.4756. PMID: 34484780; PMCID: PMC8405530. <https://pubmed.ncbi.nlm.nih.gov/34484780/>
430. Čenšćák D, Ungermann L, Štětkářová I, et al. Guillan-Barré Syndrome after First Vaccination Dose against COVID-19: Case Report. *Acta Medica (Hradec Kralove)*. 2021;64(3):183-186. doi: 10.14712/18059694.2021.31. PMID: 34779385. <https://pubmed.ncbi.nlm.nih.gov/34779385/>.
431. Khan E, Shrestha AK, Colantonio MA, et al. Acute transverse myelitis following SARS-CoV-2 vaccination: a case report and review of literature. *J Neurol*. 2021 Sep 5:1–12. doi: 10.1007/s00415-021-10785-2. Epub ahead of print. PMID: 34482455; PMCID: PMC8418691. <https://pubmed.ncbi.nlm.nih.gov/34482455/>.
432. Allen CM, Ramsamy S, Tarr AW, et al. Guillain-Barré Syndrome Variant Occurring after SARS-CoV-2 Vaccination. *Ann Neurol*. 2021 Aug;90(2):315-318. doi: 10.1002/ana.26144. Epub 2021 Jul 2. PMID: 34114269. <https://pubmed.ncbi.nlm.nih.gov/34114269/>.

433. Dalwadi V, Hancock D, Ballout AA, Et al. Axonal-Variant Guillain-Barre Syndrome Temporally Associated With mRNA-Based Moderna SARS-CoV-2 Vaccine. *Cureus*. 2021 Sep 26;13(9):e18291. doi: 10.7759/cureus.18291. PMID: 34722067; PMCID: PMC8546902. <https://pubmed.ncbi.nlm.nih.gov/34722067/>
434. Ogbebor O, Seth H, Min Z, et al. Guillain-Barré syndrome following the first dose of SARS-CoV-2 vaccine: A temporal occurrence, not a causal association. *IDCases*. 2021;24:e01143. doi: 10.1016/j.idcr.2021.e01143. Epub 2021 Apr 30. PMID: 33968610; PMCID: PMC8086372. <https://pubmed.ncbi.nlm.nih.gov/33968610/>
435. Finsterer J. SARS-CoV-2 vaccinations may not only be complicated by GBS but also by distal small fibre neuropathy. *J Neuroimmunol*. 2021 Nov 15;360:577703. doi: 10.1016/j.jneuroim.2021.577703. Epub 2021 Aug 28. PMID: 34525410; PMCID: PMC8397486. <https://pubmed.ncbi.nlm.nih.gov/34525410/>
436. Badoiu A, Moranne O, Coudray S, et al. Clinical Variant of Guillain-Barre Syndrome With Prominent Facial Diplegia After AstraZeneca Coronavirus Disease 2019 Vaccine. *J Clin Neuromuscul Dis*. 2021 Dec 1;23(2):115-116. doi: 10.1097/CND.0000000000000383. PMID: 34808658. <https://pubmed.ncbi.nlm.nih.gov/34808658/>
437. Patone M, Handunnetthi L, Saatci D, et al. Neurological complications after first dose of COVID-19 vaccines and SARS-CoV-2 infection. *Nat Med*. 2021 Dec;27(12):2144-2153. doi: 10.1038/s41591-021-01556-7. Epub 2021 Oct 25. Erratum in: *Nat Med*. 2021 Nov 29;: PMID: 34697502; PMCID: PMC8629105. <https://pubmed.ncbi.nlm.nih.gov/34697502/>
438. Bonifacio GB, Patel D, Cook S, et al. Bilateral facial weakness with paraesthesia variant of Guillain-Barré syndrome following Vaxzevria COVID-19 vaccine. *J Neurol Neurosurg Psychiatry*. 2021 Jul 14;jnnp-2021-327027. doi: 10.1136/jnnp-2021-327027. Epub ahead of print. PMID: 34261746. <https://pubmed.ncbi.nlm.nih.gov/34261746/>
439. Theuriet J, Richard C, Becker J, et al. Guillain-Barré syndrome following first injection of ChAdOx1 nCoV-19 vaccine: First report. *Rev Neurol (Paris)*. 2021 Dec;177(10):1305-1307. doi: 10.1016/j.neurol.2021.04.005. Epub 2021 Jun 24. PMID: 34217513. <https://pubmed.ncbi.nlm.nih.gov/34217513/>
440. Fukushima T, Tomita M, Ikeda S, et al. A case of sensory ataxic Guillain-Barré syndrome with immunoglobulin G anti-GM1 antibodies following the first dose of mRNA COVID-19 vaccine BNT162b2 (Pfizer). *QJM*. 2022 Jan 21;115(1):25-27. doi: 10.1093/qjmed/hcab296. PMID: 34871447; PMCID: PMC8690109. <https://pubmed.ncbi.nlm.nih.gov/34871447/>
441. Nosedà R, Ripellino P, Ghidossi S, et al. Reporting of Acute Inflammatory Neuropathies with COVID-19 Vaccines: Subgroup Disproportionality Analyses in VigiBase. *Vaccines (Basel)*. 2021 Sep 14;9(9):1022. doi: 10.3390/vaccines9091022. PMID: 34579259; PMCID: PMC8473382. <https://pubmed.ncbi.nlm.nih.gov/34579259/>

442. Tutar NK, Eyigürbüz T, Yildirim Z, et al. A variant of Guillain-Barre syndrome after SARS-CoV-2 vaccination: AMSAN. *Ideggyogy Sz.* 2021 Jul 30;74(7-08):286-288. English. doi: 10.18071/isz.74.0286. PMID: 34370408. <https://pubmed.ncbi.nlm.nih.gov/34370408/>.
443. Morehouse ZP, Paulus A, Jasti SA, et al. A Rare Variant of Guillain-Barre Syndrome Following Ad26.COV2.S Vaccination. *Cureus.* 2021 Sep 21;13(9):e18153. doi: 10.7759/cureus.18153. PMID: 34703690; PMCID: PMC8529941. <https://pubmed.ncbi.nlm.nih.gov/34703690/>.
444. Ling L, Bagshaw SM, Villeneuve PM. Guillain-Barré syndrome after SARS-CoV-2 vaccination in a patient with previous vaccine-associated Guillain-Barré syndrome. *CMAJ.* 2021 Nov 22;193(46):E1766-E1769. doi: 10.1503/cmaj.210947. PMID: 34810163; PMCID: PMC8608454. <https://pubmed.ncbi.nlm.nih.gov/34810163/>
445. Osowicki J, Morgan H, Harris A, et al. Guillain-Barré Syndrome in an Australian State Using Both mRNA and Adenovirus-Vector SARS-CoV-2 Vaccines. *Ann Neurol.* 2021 Nov;90(5):856-858. doi: 10.1002/ana.26218. Epub 2021 Sep 28. PMID: 34528279; PMCID: PMC8652921. <https://onlinelibrary.wiley.com/doi/10.1002/ana.26218>.
446. Jain E, Pandav K, Regmi P, et al. Facial Diplegia: A Rare, Atypical Variant of Guillain-Barré Syndrome and Ad26.COV2.S Vaccine. *Cureus.* 2021 Jul 25;13(7):e16612. doi: 10.7759/cureus.16612. PMID: 34447646; PMCID: PMC8381448. <https://pubmed.ncbi.nlm.nih.gov/34447646/>

Facial Nerve Palsy

447. Sato K, Mano T, Niimi Y, et al. Facial nerve palsy following the administration of COVID-19 mRNA vaccines: analysis of a self-reporting database. *Int J Infect Dis.* 2021 Oct;111:310-312. doi: 10.1016/j.ijid.2021.08.071. Epub 2021 Sep 4. PMID: 34492394; PMCID: PMC8418051. <https://www.sciencedirect.com/science/article/pii/S1201971221007049>
448. Cirillo N, Doan R. Bell's palsy and SARS-CoV-2 vaccines-an unfolding story. *Lancet Infect Dis.* 2021 Sep;21(9):1210-1211. doi: 10.1016/S1473-3099(21)00273-5. Epub 2021 Jun 7. PMID: 34111409; PMCID: PMC8184125. <https://www.sciencedirect.com/science/article/pii/S1473309921002735>
449. Repajic M, Lai XL, Xu P, et al. Bell's Palsy after second dose of Pfizer COVID-19 vaccination in a patient with history of recurrent Bell's palsy. *Brain Behav Immun Health.* 2021 May;13:100217. doi: 10.1016/j.bbih.2021.100217. Epub 2021 Feb 10. PMID: 33594349; PMCID: PMC7874945. <https://www.sciencedirect.com/science/article/pii/S266635462100020X>

450. Gómez de Terreros Caro G, Gil Díaz S, Pérez Alé M, et al. Bell's palsy following COVID-19 vaccination: a case report. *Neurologia (Engl Ed)*. 2021 Sep;36(7):567-568. doi: 10.1016/j.nrleng.2021.04.002. Epub 2021 Jul 22. PMID: 34330676; PMCID: PMC8295024. <https://www.sciencedirect.com/science/article/pii/S217358082100122X>.
451. Shemer A, Pras E, Einan-Lifshitz A, et al. Association of COVID-19 Vaccination and Facial Nerve Palsy: A Case-Control Study. *JAMA Otolaryngol Head Neck Surg*. 2021 Aug 1;147(8):739-743. doi: 10.1001/jamaoto.2021.1259. PMID: 34165512; PMCID: PMC8227442. <https://pubmed.ncbi.nlm.nih.gov/34165512/>
452. Cirillo N, Doan R. The association between COVID-19 vaccination and Bell's palsy. *Lancet Infect Dis*. 2022 Jan;22(1):5-6. doi: 10.1016/S1473-3099(21)00467-9. Epub 2021 Aug 16. PMID: 34411533; PMCID: PMC8367190. <https://pubmed.ncbi.nlm.nih.gov/34411533/>
453. Colella G, Orlandi M, Cirillo N. Bell's palsy following COVID-19 vaccination. *J Neurol*. 2021 Oct;268(10):3589-3591. doi: 10.1007/s00415-021-10462-4. Epub 2021 Feb 21. PMID: 33611630; PMCID: PMC7897359. <https://pubmed.ncbi.nlm.nih.gov/33611630/>
454. Iftikhar H, Noor SMU, Masood M, et al. Bell's Palsy After 24 Hours of mRNA-1273 SARS-CoV-2 Vaccine. *Cureus*. 2021 Jun 26;13(6):e15935. doi: 10.7759/cureus.15935. PMID: 34336436; PMCID: PMC8312995. <https://pubmed.ncbi.nlm.nih.gov/34336436/>
455. Burrows A, Bartholomew T, Rudd J, et al. Sequential contralateral facial nerve palsies following COVID-19 vaccination first and second doses. *BMJ Case Rep*. 2021 Jul 19;14(7):e243829. doi: 10.1136/bcr-2021-243829. PMID: 34281950; PMCID: PMC8291314. <https://pubmed.ncbi.nlm.nih.gov/34281950/>.
456. olk GF, Kутtenreich AM, Geitner M, et al. Eine akute Fazialisparese als mögliche Impfkomplication bei einer Impfung gegen SARS-CoV-2 [Acute facial paresis as a possible complication of vaccination against SARS-CoV-2]. *Laryngorhinootologie*. 2021 Jul;100(7):526-528. German. doi: 10.1055/a-1501-0470. Epub 2021 May 11. PMID: 33975372. <https://pubmed.ncbi.nlm.nih.gov/33975372/>.
457. Obermann M, Krasniqi M, Ewers N, et al. Bell's palsy following COVID-19 vaccination with high CSF antibody response. *Neurol Sci*. 2021 Nov;42(11):4397-4399. doi: 10.1007/s10072-021-05496-5. Epub 2021 Jul 29. PMID: 34322761; PMCID: PMC8318623. <https://pubmed.ncbi.nlm.nih.gov/34322761/>.
458. Finsterer J, Scorza FA. SARS-CoV-2 or SARS-CoV-2 vaccination associated Parsonage-Turner syndrome. Comment on: "Neuralgic amyotrophy and COVID-19 infection: 2 cases of spinal accessory nerve palsy" by Coll et al. *Joint Bone Spine* 2021;88:105196. *Joint Bone Spine*. 2021 Dec;88(6):105239. doi: 10.1016/j.jbspin.2021.105239. Epub 2021 Jun 15. PMID: 34139321; PMCID: PMC8205293. <https://pubmed.ncbi.nlm.nih.gov/34139321/>.

459. Martin-Villares C, Vazquez-Feito A, Gonzalez-Gimeno MJ, et al. Bell's palsy following a single dose of mRNA SARS-CoV-2 vaccine: a case report. *J Neurol.* 2022 Jan;269(1):47-48. doi: 10.1007/s00415-021-10617-3. Epub 2021 May 25. PMID: 34032902; PMCID: PMC8143982. <https://pubmed.ncbi.nlm.nih.gov/34032902/>.
460. Shemer A, Pras E, Hecht I. Peripheral Facial Nerve Palsy Following BNT162b2 (COVID-19) Vaccination. *Isr Med Assoc J.* 2021 Mar;23(3):143-144. PMID: 33734623. <https://pubmed.ncbi.nlm.nih.gov/33734623/>
461. Reyes-Capo DP, Stevens SM, Cavuoto KM. Acute abducens nerve palsy following COVID-19 vaccination. *J AAPOS.* 2021 Oct;25(5):302-303. doi: 10.1016/j.jaapos.2021.05.003. Epub 2021 May 24. PMID: 34044114; PMCID: PMC8142812. <https://pubmed.ncbi.nlm.nih.gov/34044114/>.
462. Sato K, Mano T, Niimi Y, et al. Facial nerve palsy following the administration of COVID-19 mRNA vaccines: analysis of a self-reporting database. *Int J Infect Dis.* 2021 Oct;111:310-312. doi: 10.1016/j.ijid.2021.08.071. Epub 2021 Sep 4. PMID: 34492394; PMCID: PMC8418051. <https://pubmed.ncbi.nlm.nih.gov/34492394/>
463. Pappaterra MC, Rivera EJ, Oliver AL. Transient Oculomotor Palsy Following the Administration of the Messenger RNA-1273 Vaccine for SARS-CoV-2 Diplopia Following the COVID-19 Vaccine. *J Neuroophthalmol.* 2021 Aug 4. doi: 10.1097/WNO.0000000000001369. Epub ahead of print. PMID: 34369471. <https://pubmed.ncbi.nlm.nih.gov/34369471/>
464. Nishizawa Y, Hoshina Y, Baker V. Bell's palsy following the Ad26.COV2.S COVID-19 vaccination. *QJM.* 2021 Nov 13;114(9):657-658. doi: 10.1093/qjmed/hcab143. PMID: 34014316; PMCID: PMC8244554. <https://pubmed.ncbi.nlm.nih.gov/34014316/>
465. Gómez de Terreros Caro G, Gil Díaz S, Pérez Alé M, et al. Bell's palsy following COVID-19 vaccination: a case report. *Neurologia (Engl Ed).* 2021 Sep;36(7):567-568. doi: 10.1016/j.nrleng.2021.04.002. Epub 2021 Jul 22. PMID: 34330676; PMCID: PMC8295024. <https://pubmed.ncbi.nlm.nih.gov/34330676/>
466. Nasuelli NA, De Marchi F, Cecchin M, et al. A case of acute demyelinating polyradiculoneuropathy with bilateral facial palsy after ChAdOx1 nCoV-19 vaccine. *Neurol Sci.* 2021 Nov;42(11):4747-4749. doi: 10.1007/s10072-021-05467-w. Epub 2021 Jul 17. PMID: 34272622; PMCID: PMC8285283. <https://pubmed.ncbi.nlm.nih.gov/34272622/>
467. Khouri C, Roustit M, Cracowski J. Adverse event reporting and risk of Bell's palsy after COVID-19 vaccination. 2021 Nov. 01. *The Lancet* vol. 21 Issue 11. [https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(21\)00646-0/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(21)00646-0/fulltext).

468. Mason MC, Liaqat A, Morrow J, et al. Bilateral Facial Nerve Palsy and COVID-19 Vaccination: Causation or Coincidence? *Cureus*. 2021 Aug 31;13(8):e17602. doi: 10.7759/cureus.17602. PMID: 34522557; PMCID: PMC8425028. <https://pubmed.ncbi.nlm.nih.gov/34522557/>
469. Cellina M, D'Arrigo A, Floridi C, et al. Left Bell's palsy following the first dose of mRNA-1273 SARS-CoV-2 vaccine: A case report. *Clin Imaging*. 2022 Feb;82:1-4. doi: 10.1016/j.clinimag.2021.10.010. Epub 2021 Nov 4. PMID: 34763263; PMCID: PMC8566211. <https://pubmed.ncbi.nlm.nih.gov/34763263/>.
470. Yu BY, Cen LS, Chen T, et al. Bell's palsy after inactivated COVID-19 vaccination in a patient with history of recurrent Bell's palsy: A case report. *World J Clin Cases*. 2021 Sep 26;9(27):8274-8279. doi: 10.12998/wjcc.v9.i27.8274. PMID: 34621891; PMCID: PMC8462203. <https://pubmed.ncbi.nlm.nih.gov/34621891/>
471. Nasuelli NA, De Marchi F, Cecchin M, et al. A case of acute demyelinating polyradiculoneuropathy with bilateral facial palsy after ChAdOx1 nCoV-19 vaccine. *Neurol Sci*. 2021 Nov;42(11):4747-4749. doi: 10.1007/s10072-021-05467-w. Epub 2021 Jul 17. PMID: 34272622; PMCID: PMC8285283. <https://pubmed.ncbi.nlm.nih.gov/34272622/>

Encephalopathy & Neurological injury

472. Al-Mashdali AF, Ata YM, Sadik N. Post-COVID-19 vaccine acute hyperactive encephalopathy with dramatic response to methylprednisolone: A case report. *Ann Med Surg (Lond)*. 2021 Sep;69:102803. doi: 10.1016/j.amsu.2021.102803. Epub 2021 Sep 6. PMID: 34512961; PMCID: PMC8420261. <https://www.sciencedirect.com/science/article/pii/S2049080121007536>
473. Corrêa DG, Cañete LAQ, Dos Santos GAC, et al. Neurological symptoms and neuroimaging alterations related with COVID-19 vaccine: Cause or coincidence? *Clin Imaging*. 2021 Dec;80:348-352. doi: 10.1016/j.clinimag.2021.08.021. Epub 2021 Sep 7. PMID: 34507266; PMCID: PMC8421080. <https://www.sciencedirect.com/science/article/pii/S0899707121003557>.
474. Vegezzi E, Ravaglia S, Buongarzone G, et al. Acute myelitis and ChAdOx1 nCoV-19 vaccine: Casual or causal association? *J Neuroimmunol*. 2021 Oct 15;359:577686. doi: 10.1016/j.jneuroim.2021.577686. Epub 2021 Jul 31. PMID: 34392078; PMCID: PMC8325554. <https://www.sciencedirect.com/science/article/pii/S0165572821002137>
475. Khayat-Khoei M, Bhattacharyya S, Katz J, et al. COVID-19 mRNA vaccination leading to CNS inflammation: a case series. *J Neurol*. 2021 Sep 4:1–14. doi: 10.1007/s00415-021-10780-7. Epub ahead of print. PMID: 34480607; PMCID: PMC8417681. <https://link.springer.com/article/10.1007/s00415-021-10780-7>

476. Román GC, Gracia F, Torres A, et al. Acute Transverse Myelitis (ATM):Clinical Review of 43 Patients With COVID-19-Associated ATM and 3 Post-Vaccination ATM Serious Adverse Events With the ChAdOx1 nCoV-19 Vaccine (AZD1222). *Front Immunol.* 2021 Apr 26;12:653786. doi: 10.3389/fimmu.2021.653786. PMID: 33981305; PMCID: PMC8107358. <https://pubmed.ncbi.nlm.nih.gov/33981305/>
477. Tahir N, Koorapati G, Prasad S, et al. SARS-CoV-2 Vaccination-Induced Transverse Myelitis. *Cureus.* 2021 Jul 25;13(7):e16624. doi: 10.7759/cureus.16624. PMID: 34458035; PMCID: PMC8384391. <https://pubmed.ncbi.nlm.nih.gov/34458035/>
478. Ismail II, Salama S. A systematic review of cases of CNS demyelination following COVID-19 vaccination. *J Neuroimmunol.* 2022 Jan 15;362:577765. doi: 10.1016/j.jneuroim.2021.577765. Epub 2021 Nov 9. PMID: 34839149; PMCID: PMC8577051. <https://pubmed.ncbi.nlm.nih.gov/34839149/>
479. Kwon H, Kim T. Autoimmune encephalitis following ChAdOx1-S SARS-CoV-2 vaccination. *Neurol Sci.* 2021 Nov 30;1–3. doi: 10.1007/s10072-021-05790-2. Epub ahead of print. PMID: 34846583; PMCID: PMC8630512. <https://pubmed.ncbi.nlm.nih.gov/34846583/>
480. Zuhorn F, Graf T, Klingebiel R, et al. Postvaccinal Encephalitis after ChAdOx1 nCov-19. *Ann Neurol.* 2021 Sep;90(3):506-511. doi: 10.1002/ana.26182. Epub 2021 Aug 13. PMID: 34324214; PMCID: PMC8426979. <https://pubmed.ncbi.nlm.nih.gov/34324214/>
481. Corrêa DG, Cañete LAQ, Dos Santos GAC, et al. Neurological symptoms and neuroimaging alterations related with COVID-19 vaccine: Cause or coincidence? *Clin Imaging.* 2021 Dec;80:348-352. doi: 10.1016/j.clinimag.2021.08.021. Epub 2021 Sep 7. PMID: 34507266; PMCID: PMC8421080. <https://pubmed.ncbi.nlm.nih.gov/34507266/>

Seizure Disorder

482. Aladdin Y, Shirah B. New-onset refractory status epilepticus following the ChAdOx1 nCoV-19 vaccine. *J Neuroimmunol.* 2021 Aug 15;357:577629. doi: 10.1016/j.jneuroim.2021.577629. Epub 2021 Jun 7. PMID: 34153802; PMCID: PMC8182981. <https://www.sciencedirect.com/science/article/pii/S0165572821001569>

Anaphylaxis

483. Turner PJ, Ansotegui IJ, Campbell DE, et al. COVID-19 vaccine-associated anaphylaxis: A statement of the World Allergy Organization Anaphylaxis Committee. *World Allergy Organ J.* 2021 Feb;14(2):100517. doi: 10.1016/j.waojou.2021.100517. Epub 2021 Feb 3. PMID: 33558825; PMCID: PMC7857113. <https://www.sciencedirect.com/science/article/pii/S1939455121000119>.

484. Krantz MS, Stone CA Jr, Rolando LA, et al. An academic hospital experience screening mRNA COVID-19 vaccine risk using patient allergy history. *J Allergy Clin Immunol Pract*. 2021 Oct;9(10):3807-3810. doi: 10.1016/j.jaip.2021.07.010. Epub 2021 Jul 19. PMID: 34293499; PMCID: PMC8288228. <https://www.sciencedirect.com/science/article/pii/S2213219821007972>
485. Shimabukuro T, Nair N. Allergic Reactions Including Anaphylaxis After Receipt of the First Dose of Pfizer-BioNTech COVID-19 Vaccine. *JAMA*. 2021 Feb 23;325(8):780-781. doi: 10.1001/jama.2021.0600. PMID: 33475702. <https://pubmed.ncbi.nlm.nih.gov/33475702/>
486. Cabanillas B, Akdis CA, Novak N. Allergic reactions to the first COVID-19 vaccine: A potential role of polyethylene glycol? *Allergy*. 2021 Jun;76(6):1617-1618. doi: 10.1111/all.14711. PMID: 33320974. <https://pubmed.ncbi.nlm.nih.gov/33320974/>
487. de Vrieze J. Pfizer's vaccine raises allergy concerns. *Science*. 2021 Jan 1;371(6524):10-11. doi: 10.1126/science.371.6524.10. PMID: 33384356. <https://pubmed.ncbi.nlm.nih.gov/33384356/>
488. CDC COVID-19 Response Team; Food and Drug Administration. Allergic Reactions Including Anaphylaxis After Receipt of the First Dose of Pfizer-BioNTech COVID-19 Vaccine - United States, December 14-23, 2020. *MMWR Morb Mortal Wkly Rep*. 2021 Jan 15;70(2):46-51. doi: 10.15585/mmwr.mm7002e1. PMID: 33444297; PMCID: PMC7808711. <https://pubmed.ncbi.nlm.nih.gov/33444297/>
489. CDC COVID-19 Response Team; Food and Drug Administration. Allergic Reactions Including Anaphylaxis After Receipt of the First Dose of Moderna COVID-19 Vaccine - United States, December 21, 2020-January 10, 2021. *MMWR Morb Mortal Wkly Rep*. 2021 Jan 29;70(4):125-129. doi: 10.15585/mmwr.mm7004e1. PMID: 33507892; PMCID: PMC7842812. <https://pubmed.ncbi.nlm.nih.gov/33507892/>
490. Lee E, Lee YK, Kim TE, et al. Reports of anaphylaxis after coronavirus disease 2019 vaccination, South Korea, 26 February to 30 April 2021. *Euro Surveill*. 2021 Aug;26(33):2100694. doi: 10.2807/1560-7917.ES.2021.26.33.2100694. PMID: 34414880; PMCID: PMC8380974. <https://pubmed.ncbi.nlm.nih.gov/34414880/>
491. Shimabukuro TT, Cole M, Su JR. Reports of Anaphylaxis After Receipt of mRNA COVID-19 Vaccines in the US-December 14, 2020-January 18, 2021. *JAMA*. 2021 Mar 16;325(11):1101-1102. doi: 10.1001/jama.2021.1967. PMID: 33576785. <https://pubmed.ncbi.nlm.nih.gov/33576785/>
492. Arcolaci A, Bronte V, Zanoni G. Immunization practices and risk of anaphylaxis: a current update, comprehensive of COVID-19 vaccination data. *Curr Opin Allergy Clin Immunol*. 2021 Oct 1;21(5):418-425. doi: 10.1097/ACI.0000000000000769. PMID: 34269740. <https://pubmed.ncbi.nlm.nih.gov/34269740/>

493. Desai AP, Desai AP, Loomis GJ. Relationship between pre-existing allergies and anaphylactic reactions post mRNA COVID-19 vaccine administration. *Vaccine*. 2021 Jul 22;39(32):4407-4409. doi: 10.1016/j.vaccine.2021.06.058. Epub 2021 Jun 23. PMID: 34215453; PMCID: PMC8220987. <https://pubmed.ncbi.nlm.nih.gov/34215453/>
494. Erdeljic Turk V. Anaphylaxis associated with the mRNA COVID-19 vaccines: Approach to allergy investigation. *Clin Immunol*. 2021 Jun;227:108748. doi: 10.1016/j.clim.2021.108748. Epub 2021 Apr 28. PMID: 33932618; PMCID: PMC8080508. <https://pubmed.ncbi.nlm.nih.gov/33932618/>
495. Klimek L, Novak N, Hamelmann E, et al. Severe allergic reactions after COVID-19 vaccination with the Pfizer/BioNTech vaccine in Great Britain and USA: Position statement of the German Allergy Societies: Medical Association of German Allergologists (AeDA), German Society for Allergology and Clinical Immunology (DGAKI) and Society for Pediatric Allergology and Environmental Medicine (GPA). *Allergo J Int*. 2021;30(2):51-55. doi: 10.1007/s40629-020-00160-4. Epub 2021 Feb 24. PMID: 33643776; PMCID: PMC7903024. <https://pubmed.ncbi.nlm.nih.gov/33643776/>
496. Moghimi SM. Allergic Reactions and Anaphylaxis to LNP-Based COVID-19 Vaccines. *Mol Ther*. 2021 Mar 3;29(3):898-900. doi: 10.1016/j.ymthe.2021.01.030. Epub 2021 Feb 5. PMID: 33571463; PMCID: PMC7862013. <https://pubmed.ncbi.nlm.nih.gov/33571463/>
497. Iguchi T, Umeda H, Kojima M, et al. Cumulative Adverse Event Reporting of Anaphylaxis After mRNA COVID-19 Vaccine (Pfizer-BioNTech) Injections in Japan: The First-Month Report. *Drug Saf*. 2021 Nov;44(11):1209-1214. doi: 10.1007/s40264-021-01104-9. Epub 2021 Aug 4. PMID: 34347278; PMCID: PMC8335977. <https://pubmed.ncbi.nlm.nih.gov/34347278/>
498. Alnæs M, Storaas T, Sørensen M, et al. Covid-19-vaksiner gir økt risiko for anafylaksi [COVID-19 vaccines increase the risk of anaphylaxis]. *Tidsskr Nor Laegeforen*. 2021 Feb 16;141(4). Norwegian. doi: 10.4045/tidsskr.21.0109. PMID: 33685103. <https://pubmed.ncbi.nlm.nih.gov/33685103/>
499. Abi Zeid Daou C, Natout MA, El Hadi N. Biphasic anaphylaxis after exposure to the first dose of Pfizer-BioNTech COVID-19 mRNA vaccine. *J Med Virol*. 2021 Oct;93(10):6027-6029. doi: 10.1002/jmv.27109. Epub 2021 Jun 6. PMID: 34050949; PMCID: PMC8242856. <https://pubmed.ncbi.nlm.nih.gov/34050949/>
500. Blumenthal KG, Robinson LB, Camargo CA Jr, et al. Acute Allergic Reactions to mRNA COVID-19 Vaccines. *JAMA*. 2021 Apr 20;325(15):1562-1565. doi: 10.1001/jama.2021.3976. PMID: 33683290; PMCID: PMC7941251. <https://pubmed.ncbi.nlm.nih.gov/33683290/>

501. Restivo V, Candore G, Barrale M, et al. Allergy to Polyethylenglicole of Anti-SARS CoV2 Vaccine Recipient: A Case Report of Young Adult Recipient and the Management of Future Exposure to SARS-CoV2. *Vaccines (Basel)*. 2021 Apr 21;9(5):412. doi: 10.3390/vaccines9050412. PMID: 33919151; PMCID: PMC8143141. <https://pubmed.ncbi.nlm.nih.gov/33919151/>
502. Hashimoto T, Ozaki A, Bhandari D, et al. High anaphylaxis rates following vaccination with the Pfizer BNT162b2 mRNA vaccine against COVID-19 in Japanese healthcare workers: a secondary analysis of initial post-approval safety data. *J Travel Med*. 2021 Oct 11;28(7):taab090. doi: 10.1093/jtm/taab090. PMID: 34128049; PMCID: PMC8344519. <https://pubmed.ncbi.nlm.nih.gov/34128049/>
503. Arroliga ME, Dhanani K, Arroliga AC, et al. Allergic reactions and adverse events associated with administration of mRNA-based vaccines. A health-care system experience. *Allergy Asthma Proc*. 2021 Sep 1;42(5):395-399. doi: 10.2500/aap.2021.42.210069. PMID: 34474708; PMCID: PMC8677490. <https://pubmed.ncbi.nlm.nih.gov/34474708/>
504. Tuyls S, Van Der Brempt X, Faber M, et al. Allergic reactions to COVID-19 vaccines: statement of the Belgian Society for Allergy and Clinical Immunology (BeSACI). *Acta Clin Belg*. 2021 Apr 1:1-6. doi: 10.1080/17843286.2021.1909447. Epub ahead of print. PMID: 33792500. <https://www.tandfonline.com/doi/abs/10.1080/17843286.2021.1909447>
505. Kelso JM. IgE-mediated allergy to polyethylene glycol (PEG) as a cause of anaphylaxis to mRNA COVID-19 vaccines. *Clin Exp Allergy*. 2022 Jan;52(1):10-11. doi: 10.1111/cea.13995. Epub 2021 Sep 21. PMID: 34318537; PMCID: PMC8444836. <https://pubmed.ncbi.nlm.nih.gov/34318537/>
506. Phillips EJ. Allergic Reactions After COVID-19 Vaccination-Putting Risk Into Perspective. *JAMA Netw Open*. 2021 Aug 2;4(8):e2122326. doi: 10.1001/jamanetworkopen.2021.22326. PMID: 34463751. <https://pubmed.ncbi.nlm.nih.gov/34463751/>
507. Hatziantoniou S, Maltezou HC, Tsakris A, et al. Anaphylactic reactions to mRNA COVID-19 vaccines: A call for further study. *Vaccine*. 2021 May 6;39(19):2605-2607. doi: 10.1016/j.vaccine.2021.03.073. Epub 2021 Apr 6. PMID: 33846043; PMCID: PMC8023205. <https://pubmed.ncbi.nlm.nih.gov/33846043/188>.
508. Ring J, Worm M, Wollenberg A, et al. Risk of severe allergic reactions to COVID-19 vaccines among patients with allergic skin diseases - practical recommendations. A position statement of ETFAD with external experts. *J Eur Acad Dermatol Venereol*. 2021 Jun;35(6):e362-e365. doi: 10.1111/jdv.17237. Epub 2021 Apr 3. PMID: 33752263; PMCID: PMC8250791. <https://pubmed.ncbi.nlm.nih.gov/33752263/>

509. Klimek L, Novak N, Cabanillas B, et al. Allergenic components of the mRNA-1273 vaccine for COVID-19: Possible involvement of polyethylene glycol and IgG-mediated complement activation. *Allergy*. 2021 Nov;76(11):3307-3313. doi: 10.1111/all.14794. Epub 2021 Jun 17. PMID: 33657648; PMCID: PMC8013891. <https://pubmed.ncbi.nlm.nih.gov/33657648/>
510. Sellaturay P, Nasser S, Islam S, et al. Polyethylene glycol (PEG) is a cause of anaphylaxis to the Pfizer/BioNTech mRNA COVID-19 vaccine. *Clin Exp Allergy*. 2021 Jun;51(6):861-863. doi: 10.1111/cea.13874. Epub 2021 Apr 9. PMID: 33825239; PMCID: PMC8251011. <https://pubmed.ncbi.nlm.nih.gov/33825239/>

Eye Disease

511. Fowler N, Mendez Martinez NR, Pallares BV, et al. Acute-onset central serous retinopathy after immunization with COVID-19 mRNA vaccine. *Am J Ophthalmol Case Rep*. 2021 Sep;23:101136. doi: 10.1016/j.ajoc.2021.101136. Epub 2021 Jun 12. PMID: 34151047; PMCID: PMC8195685. <https://www.sciencedirect.com/science/article/pii/S2451993621001456>.
512. Nowak VA, Scully M, Davagnanam I, et al. Neuro-ophthalmic complications with ChAdOx1 nCoV-19 vaccine-induced thrombocytopenia and thrombosis. *Br J Hosp Med (Lond)*. 2021 Oct 2;82(10):1-4. doi: 10.12968/hmed.2021.0428. Epub 2021 Oct 21. PMID: 34726934. <https://pubmed.ncbi.nlm.nih.gov/34726934/>
513. Book BAJ, Schmidt B, Foerster AMH. Bilateral Acute Macular Neuroretinopathy After Vaccination Against SARS-CoV-2. *JAMA Ophthalmol*. 2021 Jul 1;139(7):e212471. doi: 10.1001/jamaophthalmol.2021.2471. Epub 2021 Jul 21. PMID: 34287612. <https://pubmed.ncbi.nlm.nih.gov/34287612/>

Lymphadenopathy

514. Singh B, Kaur P, Kumar V, et al. COVID-19 vaccine induced Axillary and Pectoral Lymphadenopathy on PET scan. *Radiol Case Rep*. 2021 Jul;16(7):1819-1821. doi: 10.1016/j.radcr.2021.04.053. Epub 2021 Apr 30. PMID: 33968285; PMCID: PMC8084621. <https://www.sciencedirect.com/science/article/pii/S1930043321002612>
515. Plaza MJ, Wright J, Fernandez S. COVID-19 vaccine-related unilateral axillary lymphadenopathy: Pattern on screening breast MRI allowing for a benign assessment. *Clin Imaging*. 2021 Dec;80:139-141. doi: 10.1016/j.clinimag.2021.07.011. Epub 2021 Jul 24. PMID: 34325221; PMCID: PMC8302478. <https://pubmed.ncbi.nlm.nih.gov/34325221/>
516. Ashoor A, Shephard J, Lissidini G, et al. Axillary Adenopathy in Patients with Recent Covid-19 Vaccination: A New Diagnostic Dilemma. *Korean J Radiol*. 2021 Dec;22(12):2124-2126. doi: 10.3348/kjr.2021.0635. PMID: 34825530; PMCID: PMC8628154. <https://pubmed.ncbi.nlm.nih.gov/34825530/>.

517. Park JY, Yi SY. Rare case of contralateral supraclavicular lymphadenopathy after COVID-19 vaccination: Computed tomography and ultrasonography findings. *Radiol Case Rep.* 2021 Dec;16(12):3879-3881. doi: 10.1016/j.radcr.2021.09.042. Epub 2021 Oct 14. PMID: 34667486; PMCID: PMC8516346. <https://pubmed.ncbi.nlm.nih.gov/34667486/>
518. Igual-Rouilleault AC, Soriano I, Quan PL, et al. Unilateral axillary adenopathy induced by COVID-19 vaccine: US follow-up evaluation. *Eur Radiol.* 2021 Oct 16:1–8. doi: 10.1007/s00330-021-08309-7. Epub ahead of print. PMID: 34655312; PMCID: PMC8520081. <https://pubmed.ncbi.nlm.nih.gov/34655312/>.
519. Fernández-Prada M, Rivero-Calle I, Calvache-González A, et al. Acute onset supraclavicular lymphadenopathy coinciding with intramuscular mRNA vaccination against COVID-19 may be related to vaccine injection technique, Spain, January and February 2021. *Euro Surveill.* 2021 Mar;26(10):2100193. doi: 10.2807/1560-7917.ES.2021.26.10.2100193. PMID: 33706861; PMCID: PMC7953532. <https://pubmed.ncbi.nlm.nih.gov/33706861/>
520. Kim B, Park Y, Kim EK, et al. Supraclavicular lymphadenopathy after COVID-19 vaccination in Korea: serial follow-up using ultrasonography. *Clin Imaging.* 2021 Nov;79:201-203. doi: 10.1016/j.clinimag.2021.05.031. Epub 2021 Jun 5. PMID: 34116295; PMCID: PMC8178535. <https://pubmed.ncbi.nlm.nih.gov/34116295/>
521. Lehman CD, D'Alessandro HA, Mendoza DP, et al. Unilateral Lymphadenopathy After COVID-19 Vaccination: A Practical Management Plan for Radiologists Across Specialties. *J Am Coll Radiol.* 2021 Jun;18(6):843-852. doi: 10.1016/j.jacr.2021.03.001. Epub 2021 Mar 4. PMID: 33713605; PMCID: PMC7931722. <https://pubmed.ncbi.nlm.nih.gov/33713605/>
522. Mehta N, Sales RM, Babagbemi K, et al. Unilateral axillary adenopathy in the setting of COVID-19 vaccine: Follow-up. *Clin Imaging.* 2021 Dec;80:83-87. doi: 10.1016/j.clinimag.2021.06.037. Epub 2021 Jul 9. PMID: 34298342; PMCID: PMC8268700. <https://pubmed.ncbi.nlm.nih.gov/34298342/>
523. Mitchell OR, Dave R, Bekker J, et al. Supraclavicular lymphadenopathy following COVID-19 vaccination: an increasing presentation to the two-week wait neck lump clinic? *Br J Oral Maxillofac Surg.* 2021 Apr;59(3):384-385. doi: 10.1016/j.bjoms.2021.02.002. Epub 2021 Feb 15. PMID: 33685772; PMCID: PMC7883701. <https://pubmed.ncbi.nlm.nih.gov/33685772/>
524. Lane DL, Neelapu SS, Xu G, et al. COVID-19 Vaccine-Related Axillary and Cervical Lymphadenopathy in Patients with Current or Prior Breast Cancer and Other Malignancies: Cross-Sectional Imaging Findings on MRI, CT, and PET-CT. *Korean J Radiol.* 2021 Dec;22(12):1938-1945. doi: 10.3348/kjr.2021.0350. Epub 2021 Oct 26. PMID: 34719892; PMCID: PMC8628159. <https://pubmed.ncbi.nlm.nih.gov/34719892/>

525. Washington T, Bryan R, Clemow C. Adenopathy Following COVID-19 Vaccination. *Radiology*. 2021 Jun;299(3):E280-E281. doi: 10.1148/radiol.2021210236. Epub 2021 Feb 24. PMID: 33625299; PMCID: PMC7909073. <https://pubmed.ncbi.nlm.nih.gov/33625299/>.
526. Robinson KA, Maimone S, Gococo-Benore DA, et al. Incidence of Axillary Adenopathy in Breast Imaging After COVID-19 Vaccination. *JAMA Oncol*. 2021 Sep 1;7(9):1395-1397. doi: 10.1001/jamaoncol.2021.3127. PMID: 34292295; PMCID: PMC8299355. <https://pubmed.ncbi.nlm.nih.gov/34292295/>.
527. Mitchell OR, Couzins M, Dave R, et al. COVID-19 vaccination and low cervical lymphadenopathy in the two week neck lump clinic - a follow up audit. *Br J Oral Maxillofac Surg*. 2021 Jul;59(6):720-721. doi: 10.1016/j.bjoms.2021.04.008. Epub 2021 Apr 21. PMID: 33947605; PMCID: PMC8057932. <https://pubmed.ncbi.nlm.nih.gov/33947605/>.
528. Abou-Foul AK, Ross E, Abou-Foul M, et al. Cervical lymphadenopathy following coronavirus disease 2019 vaccine: clinical characteristics and implications for head and neck cancer services. *J Laryngol Otol*. 2021 Nov;135(11):1025-1030. doi: 10.1017/S0022215121002462. Epub 2021 Sep 16. PMID: 34526175; PMCID: PMC8476898. <https://pubmed.ncbi.nlm.nih.gov/34526175/>.
529. Hiller N, Goldberg SN, Cohen-Cymbarknoh M, et al. Lymphadenopathy Associated With the COVID-19 Vaccine. *Cureus*. 2021 Feb 23;13(2):e13524. doi: 10.7759/cureus.13524. PMID: 33786231; PMCID: PMC7994368. <https://pubmed.ncbi.nlm.nih.gov/33786231/>.
530. Hanneman K, Iwanochko RM, Thavendiranathan P. Evolution of Lymphadenopathy at PET/MRI after COVID-19 Vaccination. *Radiology*. 2021 Jun;299(3):E282. doi: 10.1148/radiol.2021210386. Epub 2021 Feb 24. Erratum in: *Radiology*. 2021 Aug;300(2):E338. PMID: 33625301; PMCID: PMC7909070. <https://pubmed.ncbi.nlm.nih.gov/33625301/>.
531. Xu G, Lu Y. COVID-19 mRNA Vaccination-Induced Lymphadenopathy Mimics Lymphoma Progression on FDG PET/CT. *Clin Nucl Med*. 2021 Apr 1;46(4):353-354. doi: 10.1097/RLU.0000000000003597. PMID: 33591026. <https://pubmed.ncbi.nlm.nih.gov/33591026/>.
532. Özütemiz C, Krystosek LA, Church AL, et al. Lymphadenopathy in COVID-19 Vaccine Recipients: Diagnostic Dilemma in Oncologic Patients. *Radiology*. 2021 Jul;300(1):E296-E300. doi: 10.1148/radiol.2021210275. Epub 2021 Feb 24. PMID: 33625300; PMCID: PMC7909072. <https://pubmed.ncbi.nlm.nih.gov/33625300/>.

533. Cohen D, Krauthammer SH, Wolf I, et al. Hypermetabolic lymphadenopathy following administration of BNT162b2 mRNA Covid-19 vaccine: incidence assessed by [18F]FDG PET-CT and relevance to study interpretation. *Eur J Nucl Med Mol Imaging*. 2021 Jun;48(6):1854-1863. doi: 10.1007/s00259-021-05314-2. Epub 2021 Mar 27. PMID: 33774684; PMCID: PMC8003894. <https://pubmed.ncbi.nlm.nih.gov/33774684/>
534. Keshavarz P, Yazdanpanah F, Rafiee F, et al. Lymphadenopathy Following COVID-19 Vaccination: Imaging Findings Review. *Acad Radiol*. 2021 Aug;28(8):1058-1071. doi: 10.1016/j.acra.2021.04.007. Epub 2021 May 1. PMID: 33985872; PMCID: PMC8088218. <https://pubmed.ncbi.nlm.nih.gov/33985872/>
535. Weeks JK, O'Brien SR, Rosenspire KC, et al. Evolving Bilateral Hypermetabolic Axillary Lymphadenopathy on FDG PET/CT Following 2-Dose COVID-19 Vaccination. *Clin Nucl Med*. 2021 Dec 1;46(12):1011-1012. doi: 10.1097/RLU.0000000000003711. PMID: 34735411; PMCID: PMC8575109. <https://pubmed.ncbi.nlm.nih.gov/34735411/>
536. Shin M, Hyun CY, Choi YH, et al. COVID-19 Vaccination-Associated Lymphadenopathy on FDG PET/CT: Distinctive Features in Adenovirus-Vectored Vaccine. *Clin Nucl Med*. 2021 Oct 1;46(10):814-819. doi: 10.1097/RLU.0000000000003800. PMID: 34115709; PMCID: PMC8411598. <https://pubmed.ncbi.nlm.nih.gov/34115709/>.
537. Faermann R, Nissan N, Halshtok-Neiman O, et al. COVID-19 Vaccination Induced Lymphadenopathy in a Specialized Breast Imaging Clinic in Israel: Analysis of 163 cases. *Acad Radiol*. 2021 Sep;28(9):1191-1197. doi: 10.1016/j.acra.2021.06.003. Epub 2021 Jun 10. PMID: 34257025; PMCID: PMC8189756. <https://pubmed.ncbi.nlm.nih.gov/34257025/>.
538. Lim J, Lee SA, Khil EK, et al. COVID-19 vaccine-related axillary lymphadenopathy in breast cancer patients: Case series with a review of literature. *Semin Oncol*. 2021 Aug-Dec;48(4-6):283-291. doi: 10.1053/j.seminoncol.2021.10.002. Epub 2021 Oct 26. PMID: 34836672; PMCID: PMC8547943. <https://pubmed.ncbi.nlm.nih.gov/34836672/>.
539. Placke JM, Reis H, Hadaschik E, et al. Coronavirus disease 2019 vaccine mimics lymph node metastases in patients undergoing skin cancer follow-up: A monocentre study. *Eur J Cancer*. 2021 Sep;154:167-174. doi: 10.1016/j.ejca.2021.06.023. Epub 2021 Jun 26. PMID: 34280870; PMCID: PMC8233908. <https://pubmed.ncbi.nlm.nih.gov/34280870/>
540. Tan NJH, Tay KXJ, Wong SBJ, et al. COVID-19 post-vaccination lymphadenopathy: Report of cytological findings from fine needle aspiration biopsy. *Diagn Cytopathol*. 2021 Dec;49(12):E467-E470. doi: 10.1002/dc.24863. Epub 2021 Aug 25. PMID: 34432391; PMCID: PMC8652983. <https://pubmed.ncbi.nlm.nih.gov/34432391/>
541. Garreffa E, Hamad A, O'Sullivan CC, et al. Regional lymphadenopathy following COVID-19 vaccination: Literature review and considerations for patient management in breast

- cancer care. *Eur J Cancer*. 2021 Dec;159:38-51. doi: 10.1016/j.ejca.2021.09.033. Epub 2021 Oct 11. PMID: 34731748; PMCID: PMC8502686.
<https://pubmed.ncbi.nlm.nih.gov/34731748/>
542. Raj S, Ogola G, Han J. COVID-19 Vaccine-Associated Subclinical Axillary Lymphadenopathy on Screening Mammogram. *Acad Radiol*. 2021 Nov 17:S1076-6332(21)00538-9. doi: 10.1016/j.acra.2021.11.010. Epub ahead of print. PMID: 34906409; PMCID: PMC8595349. <https://pubmed.ncbi.nlm.nih.gov/34906409/>
 543. Fernández-Prada M, Rivero-Calle I, Calvache-González A, et al. Acute onset supraclavicular lymphadenopathy coinciding with intramuscular mRNA vaccination against COVID-19 may be related to vaccine injection technique, Spain, January and February 2021. *Euro Surveill*. 2021 Mar;26(10):2100193. doi: 10.2807/1560-7917.ES.2021.26.10.2100193. PMID: 33706861; PMCID: PMC7953532. <https://pubmed.ncbi.nlm.nih.gov/33706861/>
 544. Kim B, Park Y, Kim EK, Lee SH. Supraclavicular lymphadenopathy after COVID-19 vaccination in Korea: serial follow-up using ultrasonography. *Clin Imaging*. 2021 Nov;79:201-203. doi: 10.1016/j.clinimag.2021.05.031. Epub 2021 Jun 5. PMID: 34116295; PMCID: PMC8178535. <https://pubmed.ncbi.nlm.nih.gov/34116295/>
 545. Nawwar AA, Searle J, Singh R, et al. Oxford-AstraZeneca COVID-19 vaccination induced lymphadenopathy on [18F]Choline PET/CT-not only an FDG finding. *Eur J Nucl Med Mol Imaging*. 2021 Jul;48(8):2657-2658. doi: 10.1007/s00259-021-05279-2. Epub 2021 Mar 4. PMID: 33661328; PMCID: PMC7930521. <https://pubmed.ncbi.nlm.nih.gov/33661328/>
 546. Ganga K, Solyar AY, Ganga R. Massive Cervical Lymphadenopathy Post-COVID-19 Vaccination. *Ear Nose Throat J*. 2021 Oct 2:1455613211048984. doi: 10.1177/01455613211048984. Epub ahead of print. PMID: 34601889. <https://pubmed.ncbi.nlm.nih.gov/34601889/>
 547. Mitchell OR, Dave R, Bekker J, Brennan PA. Supraclavicular lymphadenopathy following COVID-19 vaccination: an increasing presentation to the two-week wait neck lump clinic? *Br J Oral Maxillofac Surg*. 2021 Apr;59(3):384-385. doi: 10.1016/j.bjoms.2021.02.002. Epub 2021 Feb 15. PMID: 33685772; PMCID: PMC7883701. <https://pubmed.ncbi.nlm.nih.gov/33685772/>
 548. Lane DL, Neelapu SS, Xu G, Weaver O. COVID-19 Vaccine-Related Axillary and Cervical Lymphadenopathy in Patients with Current or Prior Breast Cancer and Other Malignancies: Cross-Sectional Imaging Findings on MRI, CT, and PET-CT. *Korean J Radiol*. 2021 Dec;22(12):1938-1945. doi: 10.3348/kjr.2021.0350. Epub 2021 Oct 26. PMID: 34719892; PMCID: PMC8628159. <https://pubmed.ncbi.nlm.nih.gov/34719892/>

549. Washington T, Bryan R, Clemow C. Adenopathy Following COVID-19 Vaccination. *Radiology*. 2021 Jun;299(3):E280-E281. doi: 10.1148/radiol.2021210236. Epub 2021 Feb 24. PMID: 33625299; PMCID: PMC7909073. <https://pubmed.ncbi.nlm.nih.gov/33625299/>.
550. Robinson KA, Maimone S, Gococo-Benore DA, et al. Incidence of Axillary Adenopathy in Breast Imaging After COVID-19 Vaccination. *JAMA Oncol*. 2021 Sep 1;7(9):1395-1397. doi: 10.1001/jamaoncol.2021.3127. PMID: 34292295; PMCID: PMC8299355. <https://pubmed.ncbi.nlm.nih.gov/34292295/>.
551. Mitchell OR, Couzins M, Dave R, et al. COVID-19 vaccination and low cervical lymphadenopathy in the two week neck lump clinic - a follow up audit. *Br J Oral Maxillofac Surg*. 2021 Jul;59(6):720-721. doi: 10.1016/j.bjoms.2021.04.008. Epub 2021 Apr 21. PMID: 33947605; PMCID: PMC8057932. <https://pubmed.ncbi.nlm.nih.gov/33947605/>.
552. Abou-Foul AK, Ross E, Abou-Foul M, et al. Cervical lymphadenopathy following coronavirus disease 2019 vaccine: clinical characteristics and implications for head and neck cancer services. *J Laryngol Otol*. 2021 Nov;135(11):1025-1030. doi: 10.1017/S0022215121002462. Epub 2021 Sep 16. PMID: 34526175; PMCID: PMC8476898. <https://pubmed.ncbi.nlm.nih.gov/34526175/>.
553. Hiller N, Goldberg SN, Cohen-Cymbarknoh M, et al. Lymphadenopathy Associated With the COVID-19 Vaccine. *Cureus*. 2021 Feb 23;13(2):e13524. doi: 10.7759/cureus.13524. PMID: 33786231; PMCID: PMC7994368. <https://pubmed.ncbi.nlm.nih.gov/33786231/>.
554. Hanneman K, Iwanochko RM, Thavendiranathan P. Evolution of Lymphadenopathy at PET/MRI after COVID-19 Vaccination. *Radiology*. 2021 Jun;299(3):E282. doi: 10.1148/radiol.2021210386. Epub 2021 Feb 24. Erratum in: *Radiology*. 2021 Aug;300(2):E338. PMID: 33625301; PMCID: PMC7909070. <https://pubmed.ncbi.nlm.nih.gov/33625301/>.
555. Vuille-Lessard É, Montani M, Bosch J, Semmo N. Autoimmune hepatitis triggered by SARS-CoV-2 vaccination. *J Autoimmun*. 2021 Sep;123:102710. doi: 10.1016/j.jaut.2021.102710. Epub 2021 Jul 28. PMID: 34332438; PMCID: PMC8316013. <https://pubmed.ncbi.nlm.nih.gov/34332438/>.

Vasculitis

556. Shakoor MT, Birkenbach MP, Lynch M. ANCA-Associated Vasculitis Following Pfizer-BioNTech COVID-19 Vaccine. *Am J Kidney Dis.* 2021 Oct;78(4):611-613. doi: 10.1053/j.ajkd.2021.06.016. Epub 2021 Jul 17. PMID: 34280507; PMCID: PMC8285210. <https://www.sciencedirect.com/science/article/pii/S0272638621007423>
557. Badier L, Toledano A, Porel T, et al. IgA vasculitis in adult patient following vaccination by ChadOx1 nCoV-19. *Autoimmun Rev.* 2021 Nov;20(11):102951. doi: 10.1016/j.autrev.2021.102951. Epub 2021 Sep 9. PMID: 34509658; PMCID: PMC8427903. <https://pubmed.ncbi.nlm.nih.gov/34509658/>
558. Erler A, Fiedler J, Koch A, et al. Leukocytoclastic Vasculitis After Vaccination With a SARS-CoV-2 Vaccine. *Arthritis Rheumatol.* 2021 Dec;73(12):2188. doi: 10.1002/art.41910. Epub 2021 Nov 29. PMID: 34196469; PMCID: PMC8426908. <https://pubmed.ncbi.nlm.nih.gov/34196469/>.
559. Ungari M, Pezzarossa E. Cutaneous Lymphocytic Vasculitis After Administration of the Second Dose of AZD1222 (Oxford-AstraZeneca) Severe Acute Respiratory Syndrome Coronavirus 2 Vaccination: Casualty or Causality? *Am J Dermatopathol.* 2022 Jan 1;44(1):80-82. doi: 10.1097/DAD.0000000000002104. PMID: 34726187. <https://pubmed.ncbi.nlm.nih.gov/34726187/>.
560. Dash S, Behera B, Sethy M, et al. COVID-19 vaccine-induced urticarial vasculitis. *Dermatol Ther.* 2021 Sep;34(5):e15093. doi: 10.1111/dth.15093. Epub 2021 Aug 14. PMID: 34369046; PMCID: PMC8420183. <https://pubmed.ncbi.nlm.nih.gov/34369046/>.
561. Shakoor MT, Birkenbach MP, Lynch M. ANCA-Associated Vasculitis Following Pfizer-BioNTech COVID-19 Vaccine. *Am J Kidney Dis.* 2021 Oct;78(4):611-613. doi: 10.1053/j.ajkd.2021.06.016. Epub 2021 Jul 17. PMID: 34280507; PMCID: PMC8285210. <https://pubmed.ncbi.nlm.nih.gov/34280507/>.
562. Bostan E, Gulseren D, Gokoz O. New-onset leukocytoclastic vasculitis after COVID-19 vaccine. *Int J Dermatol.* 2021 Oct;60(10):1305-1306. doi: 10.1111/ijd.15777. Epub 2021 Jul 9. PMID: 34241833; PMCID: PMC8444793. <https://pubmed.ncbi.nlm.nih.gov/34241833/>
563. Kar BR, Singh BS, Mohapatra L, et al. Cutaneous small-vessel vasculitis following COVID-19 vaccine. *J Cosmet Dermatol.* 2021 Nov;20(11):3382-3383. doi: 10.1111/jocd.14452. Epub 2021 Sep 16. PMID: 34529877; PMCID: PMC8661731. <https://pubmed.ncbi.nlm.nih.gov/34529877/>.

564. Cohen SR, Prussick L, Kahn JS, et al. Leukocytoclastic vasculitis flare following the COVID-19 vaccine. *Int J Dermatol*. 2021 Aug;60(8):1032-1033. doi: 10.1111/ijd.15623. Epub 2021 Apr 30. PMID: 33928638; PMCID: PMC8239799. <https://pubmed.ncbi.nlm.nih.gov/33928638/>
565. Fritzen M, Funchal GDG, Luiz MO, et al. Leukocytoclastic vasculitis after exposure to COVID-19 vaccine. *An Bras Dermatol*. 2022 Jan-Feb;97(1):118-121. doi: 10.1016/j.abd.2021.09.003. Epub 2021 Nov 10. PMID: 34836739; PMCID: PMC8578015. <https://pubmed.ncbi.nlm.nih.gov/34836739/>
566. Schierz JH, Merkel C, Kittner T, et al. Vasculitis and bursitis on [18F]FDG-PET/CT following COVID-19 mRNA vaccine: post hoc ergo propter hoc? *Eur J Nucl Med Mol Imaging*. 2022 Feb;49(3):1086-1087. doi: 10.1007/s00259-021-05553-3. Epub 2021 Sep 8. PMID: 34495381; PMCID: PMC8424403. <https://pubmed.ncbi.nlm.nih.gov/34495381/>.
567. Vassallo C, Boveri E, Brazzelli V, et al. Cutaneous lymphocytic vasculitis after administration of COVID-19 mRNA vaccine. *Dermatol Ther*. 2021 Sep;34(5):e15076. doi: 10.1111/dth.15076. Epub 2021 Aug 10. PMID: 34327795; PMCID: PMC8420357. <https://pubmed.ncbi.nlm.nih.gov/34327795>
568. Bencharattanaphakhi R, Rerknimitr P. Sinovac COVID-19 vaccine-induced cutaneous leukocytoclastic vasculitis. *JAAD Case Rep*. 2021 Dec;18:1-3. doi: 10.1016/j.jdcr.2021.10.002. Epub 2021 Oct 9. PMID: 34660867; PMCID: PMC8501511. <https://pubmed.ncbi.nlm.nih.gov/34660867/>.
569. Hakrrouch S, Tampe B. Case Report: ANCA-Associated Vasculitis Presenting With Rhabdomyolysis and Pauci-Immune Crescentic Glomerulonephritis After Pfizer-BioNTech COVID-19 mRNA Vaccination. *Front Immunol*. 2021 Sep 30;12:762006. doi: 10.3389/fimmu.2021.762006. PMID: 34659268; PMCID: PMC8514980. <https://pubmed.ncbi.nlm.nih.gov/34659268/>
570. Maye JA, Chong HP, Rajagopal V, et al. Reactivation of IgA vasculitis following COVID-19 vaccination. *BMJ Case Rep*. 2021 Nov 30;14(11):e247188. doi: 10.1136/bcr-2021-247188. PMID: 34848431; PMCID: PMC8634214. <https://pubmed.ncbi.nlm.nih.gov/34848431/>
571. Nastro F, Fabbrocini G, di Vico F, et al. Small vessel vasculitis related to varicella-zoster virus after Pfizer-BioNTech COVID-19 vaccine. *J Eur Acad Dermatol Venereol*. 2021 Nov;35(11):e745-e747. doi: 10.1111/jdv.17550. Epub 2021 Aug 4. PMID: 34310759; PMCID: PMC8446985. <https://pubmed.ncbi.nlm.nih.gov/34310759/>.

572. Dicks AB, Gray BH. Images in Vascular Medicine: Leukocytoclastic vasculitis after COVID-19 vaccine booster. *Vasc Med*. 2022 Feb;27(1):100-101. doi: 10.1177/1358863X211055507. Epub 2021 Nov 1. PMID: 34720009. <https://pubmed.ncbi.nlm.nih.gov/34720009/>
573. Cavalli G, Colafrancesco S, De Luca G, et al. Cutaneous vasculitis following COVID-19 vaccination. *Lancet Rheumatol*. 2021 Nov;3(11):e743-e744. doi: 10.1016/S2665-9913(21)00309-X. Epub 2021 Sep 30. PMID: 34611627; PMCID: PMC8483649. <https://pubmed.ncbi.nlm.nih.gov/34611627/>.
574. Bostan E, Zaid F, Akdogan N, et al. Possible case of mRNA COVID-19 vaccine-induced small-vessel vasculitis. *J Cosmet Dermatol*. 2022 Jan;21(1):51-53. doi: 10.1111/jocd.14568. Epub 2021 Oct 27. PMID: 34705320. <https://pubmed.ncbi.nlm.nih.gov/34705320/>.
575. Grossman ME, Appel G, Little AJ, et al. Post-COVID-19 vaccination IgA vasculitis in an adult. *J Cutan Pathol*. 2021 Nov 14;10.1111/cup.14168. doi: 10.1111/cup.14168. Epub ahead of print. PMID: 34779011; PMCID: PMC8652641. <https://pubmed.ncbi.nlm.nih.gov/34779011/>
576. Okuda S, Hirooka Y, Sugiyama M. Propylthiouracil-Induced Antineutrophil Cytoplasmic Antibody-Associated Vasculitis after COVID-19 Vaccination. *Vaccines (Basel)*. 2021 Jul 31;9(8):842. doi: 10.3390/vaccines9080842. PMID: 34451967; PMCID: PMC8402331. <https://pubmed.ncbi.nlm.nih.gov/34451967/>
577. Sim J, Lim CC. Coronavirus disease 2019 (COVID-19) vaccination in systemic lupus erythematosus and anti-neutrophil cytoplasmic antibody-associated vasculitis. *Clin Rheumatol*. 2021 Jun;40(6):2517-2518. doi: 10.1007/s10067-021-05750-3. Epub 2021 Apr 29. PMID: 33928459; PMCID: PMC8084413. <https://pubmed.ncbi.nlm.nih.gov/33928459/>
578. Obeid M, Fenwick C, Pantaleo G. Reactivation of IgA vasculitis after COVID-19 vaccination. *Lancet Rheumatol*. 2021 Sep;3(9):e617. doi: 10.1016/S2665-9913(21)00211-3. Epub 2021 Jul 6. PMID: 34250509; PMCID: PMC8260100. <https://pubmed.ncbi.nlm.nih.gov/34250509/>
579. Mücke VT, Knop V, Mücke MM, et al. First description of immune complex vasculitis after COVID-19 vaccination with BNT162b2: a case report. *BMC Infect Dis*. 2021 Sep 16;21(1):958. doi: 10.1186/s12879-021-06655-x. PMID: 34530771; PMCID: PMC8443965. <https://pubmed.ncbi.nlm.nih.gov/34530771/>.
580. Izzedine H, Bonilla M, Jhaveri KD. Nephrotic syndrome and vasculitis following SARS-CoV-2 vaccine: true association or circumstantial? *Nephrol Dial Transplant*. 2021 Aug

27;36(9):1565-1569. doi: 10.1093/ndt/gfab215. PMID: 34245294; PMCID: PMC8344645. <https://pubmed.ncbi.nlm.nih.gov/34245294/>.

581. Liang I, Swaminathan S, Lee AYS. Emergence of de novo cutaneous vasculitis post coronavirus disease (COVID-19) vaccination. *Clin Rheumatol*. 2021 Oct 2:1–2. doi: 10.1007/s10067-021-05948-5. Epub ahead of print. PMID: 34599716; PMCID: PMC8487223. <https://pubmed.ncbi.nlm.nih.gov/34599716/>.
582. Kharkar V, Vishwanath T, Mahajan S, et al. Asymmetrical cutaneous vasculitis following COVID-19 vaccination with unusual eosinophil preponderance. *Clin Exp Dermatol*. 2021 Dec;46(8):1596-1597. doi: 10.1111/ced.14797. Epub 2021 Jul 29. PMID: 34115904; PMCID: PMC8444878. <https://pubmed.ncbi.nlm.nih.gov/34115904/>.
583. David R, Hanna P, Lee K, et al. Relapsed ANCA associated vasculitis following Oxford AstraZeneca ChAdOx1-S COVID-19 vaccination: A case series of two patients. *Nephrology (Carlton)*. 2022 Jan;27(1):109-110. doi: 10.1111/nep.13993. Epub 2021 Nov 9. PMID: 34755433; PMCID: PMC8646290. <https://pubmed.ncbi.nlm.nih.gov/34755433/>

Skin Reactions

584. Juárez Guerrero A, Domínguez Estirado A, Crespo Quirós J, et al Delayed cutaneous reactions after the administration of mRNA vaccines against COVID-19. *J Allergy Clin Immunol Pract*. 2021 Oct;9(10):3811-3813. doi: 10.1016/j.jaip.2021.07.012. Epub 2021 Jul 19. PMID: 34293500; PMCID: PMC8288253. <https://www.sciencedirect.com/science/article/pii/S2213219821007996>
585. McMahon DE, Kovarik CL, Damsky W, et al. Clinical and pathologic correlation of cutaneous COVID-19 vaccine reactions including V-REPP: A registry-based study. *J Am Acad Dermatol*. 2022 Jan;86(1):113-121. doi: 10.1016/j.jaad.2021.09.002. Epub 2021 Sep 10. PMID: 34517079; PMCID: PMC8431833. <https://www.sciencedirect.com/science/article/pii/S0190962221024427>
586. Kong J, Cuevas-Castillo F, Nassar Met al. Bullous drug eruption after second dose of mRNA-1273 (Moderna) COVID-19 vaccine: Case report. *J Infect Public Health*. 2021 Oct;14(10):1392-1394. doi: 10.1016/j.jiph.2021.06.021. Epub 2021 Jul 8. PMID: 34294590; PMCID: PMC8264280. <https://www.sciencedirect.com/science/article/pii/S1876034121001878>.
587. Bogdanov G, Bogdanov I, Kazandjieva J, et al. Cutaneous adverse effects of the available COVID-19 vaccines. *Clin Dermatol*. 2021 May-Jun;39(3):523-531. doi: 10.1016/j.clindermatol.2021.04.001. Epub 2021 Apr 27. PMID: 34518015; PMCID: PMC8076732. <https://pubmed.ncbi.nlm.nih.gov/34518015/>

588. Holmes GA, Desai M, Limone B, et al. A case series of cutaneous COVID-19 vaccine reactions at Loma Linda University Department of Dermatology. *JAAD Case Rep.* 2021 Oct;16:53-57. doi: 10.1016/j.jdc.2021.07.038. Epub 2021 Aug 18. PMID: 34423106; PMCID: PMC8372465. <https://pubmed.ncbi.nlm.nih.gov/34423106/>
589. McMahon DE, Amerson E, Rosenbach M, et al. Cutaneous reactions reported after Moderna and Pfizer COVID-19 vaccination: A registry-based study of 414 cases. *J Am Acad Dermatol.* 2021 Jul;85(1):46-55. doi: 10.1016/j.jaad.2021.03.092. Epub 2021 Apr 7. PMID: 33838206; PMCID: PMC8024548. <https://pubmed.ncbi.nlm.nih.gov/33838206/>
590. McMahon DE, Kovarik CL, Damsky W, et al. Clinical and pathologic correlation of cutaneous COVID-19 vaccine reactions including V-REPP: A registry-based study. *J Am Acad Dermatol.* 2022 Jan;86(1):113-121. doi: 10.1016/j.jaad.2021.09.002. Epub 2021 Sep 10. PMID: 34517079; PMCID: PMC8431833. <https://pubmed.ncbi.nlm.nih.gov/34517079/>
591. Català A, Muñoz-Santos C, Galván-Casas C, et al. Cutaneous reactions after SARS-CoV-2 vaccination: a cross-sectional Spanish nationwide study of 405 cases. *Br J Dermatol.* 2022 Jan;186(1):142-152. doi: 10.1111/bjd.20639. Epub 2021 Sep 21. PMID: 34254291; PMCID: PMC8444756. <https://pubmed.ncbi.nlm.nih.gov/34254291/>
592. Wantavornprasert K, Noppakun N, Klaewsongkram J, et al. Generalized bullous fixed drug eruption after Oxford-AstraZeneca (ChAdOx1 nCoV-19) vaccination. *Clin Exp Dermatol.* 2022 Feb;47(2):428-432. doi: 10.1111/ced.14926. Epub 2021 Oct 10. PMID: 34482558; PMCID: PMC8652793. <https://pubmed.ncbi.nlm.nih.gov/34482558/>
593. Cinotti E, Perrot JL, Bruzziches F, Tet al. Eosinophilic dermatosis after AstraZeneca COVID-19 vaccination. *J Eur Acad Dermatol Venereol.* 2021 Nov 9:10.1111/jdv.17806. doi: 10.1111/jdv.17806. Epub ahead of print. PMID: 34753210; PMCID: PMC8657533. <https://pubmed.ncbi.nlm.nih.gov/34753210/>.

Prion Disease

594. Classen JB. COVID-19 RNA-based vaccines and the risk of prion disease. *Veritas Hub* January 18th, 2021. <https://proyectorveritas.net/covid-19-rna-based-vaccines-and-the-risk-of-prion-disease/>

Varicella Zoster / Herpes

595. Fathy RA, McMahon DE, Lee C, et al Varicella-zoster and herpes simplex virus reactivation post-COVID-19 vaccination: a review of 40 cases in an International Dermatology Registry. *J Eur Acad Dermatol Venereol.* 2022 Jan;36(1):e6-e9. doi: 10.1111/jdv.17646. Epub 2021 Oct 5. PMID: 34487581; PMCID: PMC8656951. <https://pubmed.ncbi.nlm.nih.gov/34487581/>

Immune Hepatitis

596. Zin Tun GS, Gleeson D, Al-Joudeh A, Dube A. Immune-mediated hepatitis with the Moderna vaccine, no longer a coincidence but confirmed. *J Hepatol.* 2021 Oct 5:S0168-8278(21)02093-6. doi: 10.1016/j.jhep.2021.09.031. Epub ahead of print. PMID: 34619252; PMCID: PMC8491984. <https://www.sciencedirect.com/science/article/pii/S0168827821020936>
597. Bril F, Al Diffalha S, Dean M, et al. Autoimmune hepatitis developing after coronavirus disease 2019 (COVID-19) vaccine: Causality or casualty? *J Hepatol.* 2021 Jul;75(1):222-224. doi: 10.1016/j.jhep.2021.04.003. Epub 2021 Apr 20. PMID: 33862041; PMCID: PMC8056822. <https://pubmed.ncbi.nlm.nih.gov/33862041/>
598. Vuille-Lessard É, Montani M, Bosch J, et al. Autoimmune hepatitis triggered by SARS-CoV-2 vaccination. *J Autoimmun.* 2021 Sep;123:102710. doi: 10.1016/j.jaut.2021.102710. Epub 2021 Jul 28. PMID: 34332438; PMCID: PMC8316013. <https://pubmed.ncbi.nlm.nih.gov/34332438/>
599. Ghielmetti M, Schaufelberger HD, Mieli-Vergani G, et al. Acute autoimmune-like hepatitis with atypical anti-mitochondrial antibody after mRNA COVID-19 vaccination: A novel clinical entity? *J Autoimmun.* 2021 Sep;123:102706. doi: 10.1016/j.jaut.2021.102706. Epub 2021 Jul 15. PMID: 34293683; PMCID: PMC8279947. <https://pubmed.ncbi.nlm.nih.gov/34293683/>.
600. Rela M, Jothimani D, Vij M, et al. Auto-immune hepatitis following COVID vaccination. *J Autoimmun.* 2021 Sep;123:102688. doi: 10.1016/j.jaut.2021.102688. Epub 2021 Jul 3. PMID: 34225251. <https://pubmed.ncbi.nlm.nih.gov/34225251/>

Hearing Loss / Tinnitus

601. Jeong J, Choi HS. Sudden sensorineural hearing loss after COVID-19 vaccination. *Int J Infect Dis.* 2021 Dec;113:341-343. doi: 10.1016/j.ijid.2021.10.025. Epub 2021 Oct 17. PMID: 34670143; PMCID: PMC8520501. <https://pubmed.ncbi.nlm.nih.gov/34670143/>.

Henoch-Schonlein Purpura

602. Naitlho A, Lahlou W, Bourial A, et al. A Rare Case of Henoch-Schönlein Purpura Following a COVID-19 Vaccine-Case Report. *SN Compr Clin Med.* 2021 Sep 8:1-4. doi: 10.1007/s42399-021-01025-9. Epub ahead of print. PMID: 34518812; PMCID: PMC8425851. <https://pubmed.ncbi.nlm.nih.gov/34518812/>

603. Hines AM, Murphy N, Mullin C, et al. Henoch-Schönlein purpura presenting post COVID-19 vaccination. *Vaccine*. 2021 Jul 30;39(33):4571-4572. doi: 10.1016/j.vaccine.2021.06.079. Epub 2021 Jun 30. PMID: 34247902; PMCID: PMC8241653. <https://pubmed.ncbi.nlm.nih.gov/34247902/>.
604. Sirufo MM, Raggiunti M, Magnanini LM, et al. Henoch-Schönlein Purpura Following the First Dose of COVID-19 Viral Vector Vaccine: A Case Report. *Vaccines (Basel)*. 2021 Sep 25;9(10):1078. doi: 10.3390/vaccines9101078. PMID: 34696186; PMCID: PMC8539285. <https://pubmed.ncbi.nlm.nih.gov/34696186/>.

Miscellaneous

605. Krutzke L, Roesler R, Wiese S, et al. Process-related impurities in the ChAdOx1 nCov-19 vaccine. *Research Square*. 10.21203/rs.3.rs-477964/v1. <https://www.researchsquare.com/article/rs-477964/v1>
606. Cirillo N. Reported orofacial adverse effects of COVID-19 vaccines: The knowns and the unknowns. *J Oral Pathol Med*. 2021 Apr;50(4):424-427. doi: 10.1111/jop.13165. Epub 2021 Feb 19. PMID: 33527524; PMCID: PMC8013400. <https://pubmed.ncbi.nlm.nih.gov/33527524/>
607. Pomara C, Sessa F, Ciaccio M, et al. COVID-19 Vaccine and Death: Causality Algorithm According to the WHO Eligibility Diagnosis. *Diagnostics (Basel)*. 2021 May 26;11(6):955. doi: 10.3390/diagnostics11060955. PMID: 34073536; PMCID: PMC8229116. <https://pubmed.ncbi.nlm.nih.gov/34073536/>
608. Chen J, Cai Y, Chen Y, et al. Nervous and Muscular Adverse Events after COVID-19 Vaccination: A Systematic Review and Meta-Analysis of Clinical Trials. *Vaccines (Basel)*. 2021 Aug 23;9(8):939. doi: 10.3390/vaccines9080939. PMID: 34452064; PMCID: PMC8402736. <https://pubmed.ncbi.nlm.nih.gov/34452064/>.
609. Watad A, De Marco G, Mahajna H, et al. Immune-Mediated Disease Flares or New-Onset Disease in 27 Subjects Following mRNA/DNA SARS-CoV-2 Vaccination. *Vaccines (Basel)*. 2021 Apr 29;9(5):435. doi: 10.3390/vaccines9050435. PMID: 33946748; PMCID: PMC8146571. <https://pubmed.ncbi.nlm.nih.gov/33946748/>
610. Okuda S, Hirooka Y, Sugiyama M. Propylthiouracil-Induced Antineutrophil Cytoplasmic Antibody-Associated Vasculitis after COVID-19 Vaccination. *Vaccines (Basel)*. 2021 Jul 31;9(8):842. doi: 10.3390/vaccines9080842. PMID: 34451967; PMCID: PMC8402331. <https://pubmed.ncbi.nlm.nih.gov/34451967/>

611. Larson V, Seidenberg R, Caplan A, et al. Clinical and histopathological spectrum of delayed adverse cutaneous reactions following COVID-19 vaccination. *J Cutan Pathol*. 2022 Jan;49(1):34-41. doi: 10.1111/cup.14104. Epub 2021 Aug 8. PMID: 34292611; PMCID: PMC8444807. <https://pubmed.ncbi.nlm.nih.gov/34292611/>.
612. Barda N, Dagan N, Ben-Shlomo Y, et al. Safety of the BNT162b2 mRNA Covid-19 Vaccine in a Nationwide Setting. *N Engl J Med*. 2021 Sep 16;385(12):1078-1090. doi: 10.1056/NEJMoa2110475. Epub 2021 Aug 25. PMID: 34432976; PMCID: PMC8427535. <https://www.ncbi.nlm.nih.gov/pubmed/34432976>
613. Prasad A, Hurlburt G, Podury S, et al. A Novel Case of Bilateral Diplegia Variant of Guillain-Barré Syndrome Following Janssen COVID-19 Vaccination. *Neurol Int*. 2021 Aug 13;13(3):404-409. doi: 10.3390/neurolint13030040. PMID: 34449715; PMCID: PMC8395825. <https://pubmed.ncbi.nlm.nih.gov/34449715/>
614. Castelli GP, Pognani C, Sozzi C, et al. Cerebral venous sinus thrombosis associated with thrombocytopenia post-vaccination for COVID-19. *Crit Care*. 2021 Apr 12;25(1):137. doi: 10.1186/s13054-021-03572-y. PMID: 33845870; PMCID: PMC8039796. <https://pubmed.ncbi.nlm.nih.gov/33845870/>.
615. Cuker A. Thrombosis with thrombocytopenia syndrome after COVID-19 vaccination. *Clin Adv Hematol Oncol*. 2021 Jul;19(7):446-449. PMID: 34236343. <https://pubmed.ncbi.nlm.nih.gov/34236343/>
616. Sung JG, Sobieszczyk PS, Bhatt DL. Acute Myocardial Infarction Within 24 Hours After COVID-19 Vaccination. *Am J Cardiol*. 2021 Oct 1;156:129-131. doi: 10.1016/j.amjcard.2021.06.047. Epub 2021 Jul 12. PMID: 34364657; PMCID: PMC8272970. <https://pubmed.ncbi.nlm.nih.gov/34364657/>.
617. Syed K, Chaudhary H, Donato A. Central Venous Sinus Thrombosis with Subarachnoid Hemorrhage Following an mRNA COVID-19 Vaccination: Are These Reports Merely Coincidental? *Am J Case Rep*. 2021 Sep 3;22:e933397. doi: 10.12659/AJCR.933397. PMID: 34478433; PMCID: PMC8422566. <https://pubmed.ncbi.nlm.nih.gov/34478433/>
618. Choi JK, Kim S, Kim SR, et al. Intracerebral Hemorrhage due to Thrombosis with Thrombocytopenia Syndrome after Vaccination against COVID-19: the First Fatal Case in Korea. *J Korean Med Sci*. 2021 Aug 9;36(31):e223. doi: 10.3346/jkms.2021.36.e223. PMID: 34402235; PMCID: PMC8352786. <https://pubmed.ncbi.nlm.nih.gov/34402235/>
619. Aladdin Y, Shirah B. New-onset refractory status epilepticus following the ChAdOx1 nCoV-19 vaccine. *J Neuroimmunol*. 2021 Aug 15;357:577629. doi: 10.1016/j.jneuroim.2021.577629. Epub 2021 Jun 7. PMID: 34153802; PMCID: PMC8182981. <https://pubmed.ncbi.nlm.nih.gov/34153802/>

620. Cattaneo M. Thrombosis with Thrombocytopenia Syndrome associated with viral vector COVID-19 vaccines. *Eur J Intern Med.* 2021 Jul;89:22-24. doi: 10.1016/j.ejim.2021.05.031. Epub 2021 May 25. PMID: 34092488; PMCID: PMC8148431. <https://pubmed.ncbi.nlm.nih.gov/34092488/>
621. Malik B, Kalantary A, Rikabi K, et al. Pulmonary embolism, transient ischaemic attack and thrombocytopenia after the Johnson & Johnson COVID-19 vaccine. *BMJ Case Rep.* 2021 Jul 14;14(7):e243975. doi: 10.1136/bcr-2021-243975. PMID: 34261635; PMCID: PMC8280905. <https://pubmed.ncbi.nlm.nih.gov/34261635/>
622. Barral M, Arrive L, El Mouhadi-Barnier S, et al. Thromboaspiration and fibrinolysis infusion for portomesenteric thrombosis after AstraZeneca COVID-19 vaccine administration. *Intensive Care Med.* 2021 Sep;47(9):1034-1036. doi: 10.1007/s00134-021-06458-3. Epub 2021 Jun 16. PMID: 34132839; PMCID: PMC8206184. <https://pubmed.ncbi.nlm.nih.gov/34132839/>.
623. Warkentin TE, Greinacher A. Spontaneous HIT syndrome: Knee replacement, infection, and parallels with vaccine-induced immune thrombotic thrombocytopenia. *Thromb Res.* 2021 Aug;204:40-51. doi: 10.1016/j.thromres.2021.05.018. Epub 2021 Jun 9. PMID: 34144250. <https://pubmed.ncbi.nlm.nih.gov/34144250/>
624. Carli G, Nichele I, Ruggeri M, et al. Deep vein thrombosis (DVT) occurring shortly after the second dose of mRNA SARS-CoV-2 vaccine. *Intern Emerg Med.* 2021 Apr;16(3):803-804. doi: 10.1007/s11739-021-02685-0. Epub 2021 Mar 9. PMID: 33687691; PMCID: PMC7940863. <https://pubmed.ncbi.nlm.nih.gov/33687691/>
625. Althaus K, Möller P, Uzun G, et al. Antibody-mediated procoagulant platelets in SARS-CoV-2-vaccination associated immune thrombotic thrombocytopenia. *Haematologica.* 2021 Aug 1;106(8):2170-2179. doi: 10.3324/haematol.2021.279000. PMID: 34011137; PMCID: PMC8327736. <https://pubmed.ncbi.nlm.nih.gov/34011137/>.
626. González-Romero N, Morillo Montañes V, Vicente Sánchez I, et al. Úlceras De Lipschütz Tras La Vacuna Frente A La Covid-19 De Astrazeneca [Lipschütz Ulcers After the AstraZeneca COVID-19 Vaccine]. *Actas Dermosifiliogr (Engl Ed).* 2021 Aug 2. Spanish. doi: 10.1016/j.ad.2021.07.004. Epub ahead of print. PMID: 34366434; PMCID: PMC8327554. <https://pubmed.ncbi.nlm.nih.gov/34366434/>.
627. Crespo Burillo JA, Lorient Martínez C, García Arguedas C, et al. Amyotrophic neuralgia secondary to Vaxzevri (AstraZeneca) COVID-19 vaccine. *Neurologia (Engl Ed).* 2021 Sep;36(7):571-572. doi: 10.1016/j.nrleng.2021.05.002. Epub 2021 Jul 28. PMID: 34330677; PMCID: PMC8316086. <https://pubmed.ncbi.nlm.nih.gov/34330677/>

628. Sangli S, Virani A, Cheronis N, et al. Thrombosis With Thrombocytopenia After the Messenger RNA-1273 Vaccine. *Ann Intern Med*. 2021 Oct;174(10):1480-1482. doi: 10.7326/L21-0244. Epub 2021 Jun 29. PMID: 34181446; PMCID: PMC8251935. <https://pubmed.ncbi.nlm.nih.gov/34181446/>
629. Wolthers SA, Stenberg J, Nielsen HB, et al. [Intracerebral haemorrhage twelve days after vaccination with ChAdOx1 nCoV-19]. *Ugeskr Laeger*. 2021 Aug 30;183(35):V05210425. Danish. PMID: 34477089. <https://pubmed.ncbi.nlm.nih.gov/34477089/>
630. Rzymiski P, Perek B, Flisiak R. Thrombotic Thrombocytopenia after COVID-19 Vaccination: In Search of the Underlying Mechanism. *Vaccines (Basel)*. 2021 May 27;9(6):559. doi: 10.3390/vaccines9060559. PMID: 34071883; PMCID: PMC8227748. <https://pubmed.ncbi.nlm.nih.gov/34071883/>
631. Aleem A, Nadeem AJ. Coronavirus (COVID-19) Vaccine-Induced Immune Thrombotic Thrombocytopenia (VITT). 2021 Jul 18. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan–. PMID: 34033367. <https://pubmed.ncbi.nlm.nih.gov/34033367/>
632. Abbattista M, Martinelli I, Peyvandi F. Comparison of adverse drug reactions among four COVID-19 vaccines in Europe using the EudraVigilance database: Thrombosis at unusual sites. *J Thromb Haemost*. 2021 Oct;19(10):2554-2558. doi: 10.1111/jth.15493. Epub 2021 Aug 25. PMID: 34375510; PMCID: PMC8420446. <https://pubmed.ncbi.nlm.nih.gov/34375510/>
633. Bourguignon A, Arnold DM, Warkentin TE, et al. Adjunct Immune Globulin for Vaccine-Induced Immune Thrombotic Thrombocytopenia. *N Engl J Med*. 2021 Aug 19;385(8):720-728. doi: 10.1056/NEJMoa2107051. Epub 2021 Jun 9. PMID: 34107198; PMCID: PMC8362588. <https://pubmed.ncbi.nlm.nih.gov/34107198/>
634. Fanni D, Saba L, Demontis R, et al. Vaccine-induced severe thrombotic thrombocytopenia following COVID-19 vaccination: a report of an autoptic case and review of the literature. *Eur Rev Med Pharmacol Sci*. 2021 Aug;25(15):5063-5069. doi: 10.26355/eurrev_202108_26464. PMID: 34355379. <https://pubmed.ncbi.nlm.nih.gov/34355379/>.
635. Wiest NE, Johns GS, Edwards E. A Case of Acute Pulmonary Embolus after mRNA SARS-CoV-2 Immunization. *Vaccines (Basel)*. 2021 Aug 14;9(8):903. doi: 10.3390/vaccines9080903. PMID: 34452028; PMCID: PMC8402540. <https://pubmed.ncbi.nlm.nih.gov/34452028/>
636. Gessler F, Schmitz AK, Dubinski D, et al. Neurosurgical Considerations Regarding Decompressive Craniectomy for Intracerebral Hemorrhage after SARS-CoV-2-Vaccination

- in Vaccine Induced Thrombotic Thrombocytopenia-VITT. *J Clin Med*. 2021 Jun 24;10(13):2777. doi: 10.3390/jcm10132777. PMID: 34202817; PMCID: PMC8269113. <https://pubmed.ncbi.nlm.nih.gov/34202817/>
637. Park YS. Thrombosis and severe acute respiratory syndrome coronavirus 2 vaccines: vaccine-induced immune thrombotic thrombocytopenia. *Clin Exp Pediatr*. 2021 Aug;64(8):400-405. doi: 10.3345/cep.2021.00717. Epub 2021 Jun 30. PMID: 34237213; PMCID: PMC8342878. <https://pubmed.ncbi.nlm.nih.gov/34237213/>.
 638. Maayan H, Kirgner I, Gutwein O, et al. Acquired thrombotic thrombocytopenic purpura: A rare disease associated with BNT162b2 vaccine. *J Thromb Haemost*. 2021 Sep;19(9):2314-2317. doi: 10.1111/jth.15420. Epub 2021 Jul 7. PMID: 34105247; PMCID: PMC8237075. <https://pubmed.ncbi.nlm.nih.gov/34105247/>.
 639. Holm S, Kared H, Michelsen AE, et al. Immune complexes, innate immunity, and NETosis in ChAdOx1 vaccine-induced thrombocytopenia. *Eur Heart J*. 2021 Oct 14;42(39):4064-4072. doi: 10.1093/eurheartj/ehab506. PMID: 34405870; PMCID: PMC8385969. <https://pubmed.ncbi.nlm.nih.gov/34405870/>.
 640. Min YG, Ju W, Ha YE, et al. Sensory Guillain-Barre syndrome following the ChAdOx1 nCov-19 vaccine: Report of two cases and review of literature. *J Neuroimmunol*. 2021 Oct 15;359:577691. doi: 10.1016/j.jneuroim.2021.577691. Epub 2021 Aug 8. PMID: 34416410; PMCID: PMC8349403. <https://pubmed.ncbi.nlm.nih.gov/34416410/>.
 641. Saraceno JJF, Souza GM, Dos Santos Finamor LP, et al. Vogt-Koyanagi-Harada Syndrome following COVID-19 and ChAdOx1 nCoV-19 (AZD1222) vaccine. *Int J Retina Vitreous*. 2021 Aug 30;7(1):49. doi: 10.1186/s40942-021-00319-3. PMID: 34462013; PMCID: PMC8404022. <https://pubmed.ncbi.nlm.nih.gov/34462013/>.
 642. Papasavvas I, Herbort CP Jr. Reactivation of Vogt-Koyanagi-Harada disease under control for more than 6 years, following anti-SARS-CoV-2 vaccination. *J Ophthalmic Inflamm Infect*. 2021 Jul 5;11(1):21. doi: 10.1186/s12348-021-00251-5. PMID: 34224024; PMCID: PMC8256412. <https://pubmed.ncbi.nlm.nih.gov/34224024/>.
 643. Choi GJ, Baek SH, Kim J, et al. Fatal Systemic Capillary Leak Syndrome after SARS-CoV-2 Vaccination in Patient with Multiple Myeloma. *Emerg Infect Dis*. 2021 Nov;27(11):2973-2975. doi: 10.3201/eid2711.211723. Epub 2021 Aug 30. PMID: 34459725; PMCID: PMC8544977. <https://pubmed.ncbi.nlm.nih.gov/34459725/>
 644. Hyun H, Song JY, Seong H, et al. Polyarthralgia and Myalgia Syndrome after ChAdOx1 nCoV-19 Vaccination. *J Korean Med Sci*. 2021 Aug 30;36(34):e245. doi: 10.3346/jkms.2021.36.e245. PMID: 34463066; PMCID: PMC8405407. <https://pubmed.ncbi.nlm.nih.gov/34463066/>

645. İremli BG, Şendur SN, Ünlütürk U. Three Cases of Subacute Thyroiditis Following SARS-CoV-2 Vaccine: Postvaccination ASIA Syndrome. *J Clin Endocrinol Metab*. 2021 Aug 18;106(9):2600-2605. doi: 10.1210/clinem/dgab373. PMID: 34043800; PMCID: PMC8194612. <https://pubmed.ncbi.nlm.nih.gov/34043800/>.
646. Trogstad L, Robertson AH, Mjaaland S, et al. Association between ChAdOx1 nCoV-19 vaccination and bleeding episodes: Large population-based cohort study. *Vaccine*. 2021 Sep 24;39(40):5854-5857. doi: 10.1016/j.vaccine.2021.08.055. Epub 2021 Aug 31. PMID: 34479760; PMCID: PMC8406020. <https://pubmed.ncbi.nlm.nih.gov/34479760/>.
647. Esba LCA, Al Jeraisy M. Reported adverse effects following COVID-19 vaccination at a tertiary care hospital, focus on cerebral venous sinus thrombosis (CVST). *Expert Rev Vaccines*. 2021 Aug;20(8):1037-1042. doi: 10.1080/14760584.2021.1940145. Epub 2021 Jun 17. PMID: 34092166; PMCID: PMC8220435. <https://pubmed.ncbi.nlm.nih.gov/34092166/>
648. Kreuter A, Licciardi-Fernandez MJ, Burmann SN, et al. Induction and exacerbation of subacute cutaneous lupus erythematosus following mRNA-based or adenoviral vector-based SARS-CoV-2 vaccination. *Clin Exp Dermatol*. 2022 Jan;47(1):161-163. doi: 10.1111/ced.14858. Epub 2021 Sep 13. PMID: 34291477; PMCID: PMC8444843. <https://pubmed.ncbi.nlm.nih.gov/34291477/>
649. Irvine NJ, Wiles BL. Petechiae and Desquamation of Fingers Following Immunization With BTN162b2 Messenger RNA (mRNA) COVID-19 Vaccine. *Cureus*. 2021 Aug 3;13(8):e16858. doi: 10.7759/cureus.16858. PMID: 34513435; PMCID: PMC8413049. <https://pubmed.ncbi.nlm.nih.gov/34513435/>
650. Lensen R, Netea MG, Rosendaal FR. Hepatitis C Virus Reactivation Following COVID-19 Vaccination - A Case Report. *Int Med Case Rep J*. 2021 Aug 29;14:573-576. doi: 10.2147/IMCRJ.S328482. Erratum in: *Int Med Case Rep J*. 2021 Oct 27;14:741-742. PMID: 34512037; PMCID: PMC8412816. <https://pubmed.ncbi.nlm.nih.gov/34512037/>
651. Khan TA, Sidhu N, Khan L, et al. Bilateral Immune-Mediated Keratolysis After Immunization With SARS-CoV-2 Recombinant Viral Vector Vaccine. *Cornea*. 2021 Dec 1;40(12):1629-1632. doi: 10.1097/ICO.0000000000002844. PMID: 34483273. <https://pubmed.ncbi.nlm.nih.gov/34483273/>.
652. An QJ, Qin DA, Pei JX. Reactive arthritis after COVID-19 vaccination. *Hum Vaccin Immunother*. 2021 Sep 2;17(9):2954-2956. doi: 10.1080/21645515.2021.1920274. Epub 2021 May 25. PMID: 34033732; PMCID: PMC8381833. <https://pubmed.ncbi.nlm.nih.gov/34033732/>.
653. Vera-Lastra O, Ordinola Navarro A, Cruz Domiguez MP, et al. Two Cases of Graves' Disease Following SARS-CoV-2 Vaccination: An Autoimmune/Inflammatory Syndrome Induced by

- Adjuvants. Thyroid. 2021 Sep;31(9):1436-1439. doi: 10.1089/thy.2021.0142. Epub 2021 May 3. PMID: 33858208. <https://pubmed.ncbi.nlm.nih.gov/33858208/>
654. Etemadifar M, Sigari AA, Sedaghat N, et al. Acute relapse and poor immunization following COVID-19 vaccination in a rituximab-treated multiple sclerosis patient. Hum Vaccin Immunother. 2021 Oct 3;17(10):3481-3483. doi: 10.1080/21645515.2021.1928463. Epub 2021 May 20. PMID: 34015240; PMCID: PMC8437516. <https://pubmed.ncbi.nlm.nih.gov/34015240/>
 655. Khayat-Khoei M, Bhattacharyya S, Katz J, et al. COVID-19 mRNA vaccination leading to CNS inflammation: a case series. J Neurol. 2021 Sep 4:1–14. doi: 10.1007/s00415-021-10780-7. Epub ahead of print. PMID: 34480607; PMCID: PMC8417681. <https://pubmed.ncbi.nlm.nih.gov/34480607/>
 656. von Tresckow J, von Tresckow B, Reinhardt HC, et al. Thymic hyperplasia after mRNA based Covid-19 vaccination. Radiol Case Rep. 2021 Dec;16(12):3744-3745. doi: 10.1016/j.radcr.2021.08.050. Epub 2021 Aug 26. PMID: 34462647; PMCID: PMC8387216. <https://pubmed.ncbi.nlm.nih.gov/34462647/>
 657. Vogrig A, Janes F, Gigli GL, et al. Acute disseminated encephalomyelitis after SARS-CoV-2 vaccination. Clin Neurol Neurosurg. 2021 Sep;208:106839. doi: 10.1016/j.clineuro.2021.106839. Epub 2021 Jul 21. PMID: 34325334; PMCID: PMC8294707. <https://pubmed.ncbi.nlm.nih.gov/34325334/>
 658. Chuang TY, Burda K, Teklemariam E, et al. Tolosa-Hunt Syndrome Presenting After COVID-19 Vaccination. Cureus. 2021 Jul 31;13(7):e16791. doi: 10.7759/cureus.16791. PMID: 34513398; PMCID: PMC8405240. <https://pubmed.ncbi.nlm.nih.gov/34513398/>
 659. Robichaud J, Côté C, Côté F. Systemic capillary leak syndrome after ChAdOx1 nCoV-19 (Oxford-AstraZeneca) vaccination. CMAJ. 2021 Aug 30;193(34):E1341-E1344. doi: 10.1503/cmaj.211212. Epub 2021 Aug 6. PMID: 34362727; PMCID: PMC8432311. <https://pubmed.ncbi.nlm.nih.gov/34362727/>
 660. Banerjee S, Sandhu M, Tonzi E, et al. Immune-Mediated Thrombocytopenia Associated With Ad26.COV2.S (Janssen; Johnson & Johnson) Vaccine. Am J Ther. 2021 Aug 20;28(5):e604-e606. doi: 10.1097/MJT.0000000000001431. PMID: 34469919; PMCID: PMC8415511. <https://pubmed.ncbi.nlm.nih.gov/34469919/>.
 661. Al-Samkari H, Leaf RK, Goodarzi K. Transient Thrombocytopenia With Glycoprotein-Specific Platelet Autoantibodies After Ad26.COV2.S Vaccination: A Case Report. Ann Intern Med. 2021 Nov;174(11):1632-1633. doi: 10.7326/L21-0427. Epub 2021 Sep 14. PMID: 34516272; PMCID: PMC8500336. <https://pubmed.ncbi.nlm.nih.gov/34516272/>.

662. Al-Mashdali AF, Ata YM, Sadik N. Post-COVID-19 vaccine acute hyperactive encephalopathy with dramatic response to methylprednisolone: A case report. *Ann Med Surg (Lond)*. 2021 Sep;69:102803. doi: 10.1016/j.amsu.2021.102803. Epub 2021 Sep 6. PMID: 34512961; PMCID: PMC8420261. <https://pubmed.ncbi.nlm.nih.gov/34512961/>
663. Snapiri O, Rosenberg Danziger C, Shirman N, et al. Transient Cardiac Injury in Adolescents Receiving the BNT162b2 mRNA COVID-19 Vaccine. *Pediatr Infect Dis J*. 2021 Oct 1;40(10):e360-e363. doi: 10.1097/INF.0000000000003235. PMID: 34077949; PMCID: PMC8443419. <https://pubmed.ncbi.nlm.nih.gov/34077949/>
664. Clayton-Chubb D, Schneider D, Freeman E, et al. Autoimmune hepatitis developing after the ChAdOx1 nCoV-19 (Oxford-AstraZeneca) vaccine. *J Hepatol*. 2021 Nov;75(5):1249-1250. doi: 10.1016/j.jhep.2021.06.014. Epub 2021 Jun 22. PMID: 34171435; PMCID: PMC8219312. <https://pubmed.ncbi.nlm.nih.gov/34171435/>
665. Maniscalco GT, Manzo V, Di Battista ME, et al. Severe Multiple Sclerosis Relapse After COVID-19 Vaccination: A Case Report. *Front Neurol*. 2021 Aug 10;12:721502. doi: 10.3389/fneur.2021.721502. PMID: 34447349; PMCID: PMC8382847. <https://pubmed.ncbi.nlm.nih.gov/34447349/>
666. Ai S, Awford A, Roncolato F. Hemophagocytic lymphohistiocytosis following ChAdOx1 nCoV-19 vaccination. *J Med Virol*. 2022 Jan;94(1):14-16. doi: 10.1002/jmv.27279. Epub 2021 Aug 23. PMID: 34406660; PMCID: PMC8426904. <https://pubmed.ncbi.nlm.nih.gov/34406660/>
667. Nagrani P, Jindal R, Goyal D. Onset/flare of psoriasis following the ChAdOx1 nCoV-19 Corona virus vaccine (Oxford-AstraZeneca/Covishield): Report of two cases. *Dermatol Ther*. 2021 Sep;34(5):e15085. doi: 10.1111/dth.15085. Epub 2021 Aug 10. PMID: 34350668; PMCID: PMC8420438. <https://pubmed.ncbi.nlm.nih.gov/34350668/>
668. Armoni-Weiss G, Sheffer-Levi S, Horev L, et al. Exacerbation of Hailey-Hailey Disease Following SARS-CoV-2 Vaccination. *Acta Derm Venereol*. 2021 Sep 22;101(9):adv00554. doi: 10.2340/00015555-3907. PMID: 34436620. <https://pubmed.ncbi.nlm.nih.gov/34436620/>
669. Kim B, Park Y, Kim EK, et al. Supraclavicular lymphadenopathy after COVID-19 vaccination in Korea: serial follow-up using ultrasonography. *Clin Imaging*. 2021 Nov;79:201-203. doi: 10.1016/j.clinimag.2021.05.031. Epub 2021 Jun 5. PMID: 34116295; PMCID: PMC8178535. <https://pubmed.ncbi.nlm.nih.gov/34116295/>
670. Sookaromdee P, Wiwanitkit V. COVID-19 vaccine, immune thrombotic thrombocytopenia, jaundice, hyperviscosity: concern on cases with underlying liver problem. *Ann Hepatol*. 2021 Sep-Oct;24:100525. doi: 10.1016/j.aohp.2021.100525. PMID: 34509271; PMCID: PMC8425075. <https://pubmed.ncbi.nlm.nih.gov/34509271/>

671. Muir KW, Perry RJ. The International Cerebral Venous Thrombosis Consortium report on cerebral venous thrombosis following vaccination against SARS-CoV-2. *Eur J Neurol*. 2021 Nov;28(11):3543-3544. doi: 10.1111/ene.15085. Epub 2021 Sep 14. PMID: 34462996; PMCID: PMC8652852. <https://pubmed.ncbi.nlm.nih.gov/34462996/>
672. Choi PY, Hsu D, Tran HA, et al. Immune thrombocytopenia following vaccination during the COVID-19 pandemic. *Haematologica*. 2021 Aug 26. doi: 10.3324/haematol.2021.279442. Epub ahead of print. PMID: 34435486. <https://pubmed.ncbi.nlm.nih.gov/34435486/>
673. Bari R, Bepari AK, Reza HM. COVID-19: Lessons from Norway tragedy must be considered in vaccine rollout planning in least developed/developing countries. *Open Med (Wars)*. 2021 Aug 11;16(1):1168-1169. doi: 10.1515/med-2021-0334. PMID: 34435142; PMCID: PMC8359902. <https://pubmed.ncbi.nlm.nih.gov/34435142/>
674. Leung VS, Lin Y. Rituximab-induced acute lympholysis and pancytopenia after COVID-19 vaccination. *Clin Case Rep*. 2021 Aug 16;9(8):e04517. doi: 10.1002/ccr3.4517. PMID: 34429981; PMCID: PMC8365555. <https://pubmed.ncbi.nlm.nih.gov/34429981/>
675. Bostan E, Elmas L, Yel B, et al. Exacerbation of plaque psoriasis after inactivated and BNT162b2 mRNA COVID-19 vaccines: A report of two cases. *Dermatol Ther*. 2021 Nov;34(6):e15110. doi: 10.1111/dth.15110. Epub 2021 Aug 30. PMID: 34427024; PMCID: PMC8646432. <https://pubmed.ncbi.nlm.nih.gov/34427024/>
676. DeDent AM, Farrand E. Vaccine-induced interstitial lung disease: a rare reaction to COVID-19 vaccination. *Thorax*. 2022 Jan;77(1):9-10. doi: 10.1136/thoraxjnl-2021-217985. Epub 2021 Sep 11. PMID: 34510014. <https://pubmed.ncbi.nlm.nih.gov/34510014/>.
677. Coto-Segura P, Fernández-Prada M, Mir-Bonafé M, et al. Vesiculobullous skin reactions induced by COVID-19 mRNA vaccine: report of four cases and review of the literature. *Clin Exp Dermatol*. 2022 Jan;47(1):141-143. doi: 10.1111/ced.14835. Epub 2021 Sep 2. PMID: 34236711; PMCID: PMC8444733. <https://pubmed.ncbi.nlm.nih.gov/34236711/>
678. Salih F, Schönborn L, Kohler S, et al. Vaccine-Induced Thrombocytopenia with Severe Headache. *N Engl J Med*. 2021 Nov 25;385(22):2103-2105. doi: 10.1056/NEJMc2112974. Epub 2021 Sep 15. PMID: 34525282; PMCID: PMC8522796. <https://pubmed.ncbi.nlm.nih.gov/34525282/>
679. Vollmann D, Eiffert H, Schuster A. Acute Perimyocarditis Following First Dose of mRNA Vaccine Against COVID-19. *Dtsch Arztebl Int*. 2021 Aug 9;118(31-32):546. doi: 10.3238/arztebl.m2021.0288. PMID: 34515024; PMCID: PMC8422910. <https://pubmed.ncbi.nlm.nih.gov/34515024/>

680. Faissner S, Richter D, Ceylan U, et al. COVID-19 mRNA vaccine induced rhabdomyolysis and fasciitis. *J Neurol*. 2021 Aug 25;1–2. doi: 10.1007/s00415-021-10768-3. Epub ahead of print. PMID: 34435250; PMCID: PMC8386679. <https://pubmed.ncbi.nlm.nih.gov/34435250/>.
681. Annabi E, Dupin N, Sohier P, et al. Rare cutaneous adverse effects of COVID-19 vaccines: a case series and review of the literature. *J Eur Acad Dermatol Venereol*. 2021 Dec;35(12):e847-e850. doi: 10.1111/jdv.17578. Epub 2021 Sep 2. PMID: 34363637; PMCID: PMC8447383. <https://pubmed.ncbi.nlm.nih.gov/34363637/>
682. Cebeci F, Kartal İ. Petechial skin rash associated with CoronaVac vaccination: first cutaneous side effect report before phase 3 results. *Eur J Hosp Pharm*. 2021 May 24;ejhpharm-2021-002794. doi: 10.1136/ehpharm-2021-002794. Epub ahead of print. PMID: 34031153. <https://ejhp.bmj.com/content/early/2021/05/23/ehpharm-2021-002794>
683. Gerber GF, Yuan X, Yu J, et al. COVID-19 vaccines induce severe hemolysis in paroxysmal nocturnal hemoglobinuria. *Blood*. 2021 Jul 1;137(26):3670-3673. doi: 10.1182/blood.2021011548. PMID: 33945618; PMCID: PMC8099541. <https://ashpublications.org/blood/article/137/26/3670/475905/COVID-19-vaccines-induce-severe-hemolysis-in>
684. Schulz JB, Berlit P, Diener HC, et al. COVID-19 Vaccine-Associated Cerebral Venous Thrombosis in Germany. *Ann Neurol*. 2021 Oct;90(4):627-639. doi: 10.1002/ana.26172. Epub 2021 Aug 23. PMID: 34288044; PMCID: PMC8427115. <https://pubmed.ncbi.nlm.nih.gov/34288044/>.
685. Walter U, Volmer E, Wittstock M, et al. Hirnvenen- und Sinusthrombose nach COVID-19-Schutzimpfung : Neurologisch-radiologisches Prozedere [Cerebral venous sinus thrombosis after COVID-19 vaccination : Neurological and radiological management]. *Radiologe*. 2021 Oct;61(10):923-932. German. doi: 10.1007/s00117-021-00887-3. Epub 2021 Jul 29. PMID: 34327553; PMCID: PMC8320717. <https://pubmed.ncbi.nlm.nih.gov/34327553/>.
686. Franchini M, Testa S, Pezzo M, et al. Cerebral venous thrombosis and thrombocytopenia post-COVID-19 vaccination. *Thromb Res*. 2021 Jun;202:182-183. doi: 10.1016/j.thromres.2021.04.001. Epub 2021 Apr 8. PMID: 33878469; PMCID: PMC8028600. <https://pubmed.ncbi.nlm.nih.gov/33878469/>.
687. Mehta PR, Apap Mangion S, Bengner M, et al. Cerebral venous sinus thrombosis and thrombocytopenia after COVID-19 vaccination - A report of two UK cases. *Brain Behav Immun*. 2021 Jul;95:514-517. doi: 10.1016/j.bbi.2021.04.006. Epub 2021 Apr 20. PMID: 33857630; PMCID: PMC8056834. <https://pubmed.ncbi.nlm.nih.gov/33857630/>.

688. Ciccone A. SARS-CoV-2 vaccine-induced cerebral venous thrombosis. *Eur J Intern Med*. 2021 Jul;89:19-21. doi: 10.1016/j.ejim.2021.05.026. Epub 2021 May 25. PMID: 34090750; PMCID: PMC8148433. <https://pubmed.ncbi.nlm.nih.gov/34090750/>.
689. Walter U, Fuchs M, Grossmann A, et al. Adenovirus-Vectored COVID-19 Vaccine-Induced Immune Thrombosis of Carotid Artery: A Case Report. *Neurology*. 2021 Jul 26;10.1212/WNL.0000000000012576. doi: 10.1212/WNL.0000000000012576. Epub ahead of print. PMID: 34312301. <https://pubmed.ncbi.nlm.nih.gov/34312301/>.
690. Yahyavi-Firouz-Abadi N, Naik RP. Cerebral venous sinus thrombosis associated with vaccine-induced thrombotic thrombocytopenia. *Neuroradiol J*. 2021 Aug 1;19714009211036687. doi: 10.1177/19714009211036687. Epub ahead of print. PMID: 34333995. <https://pubmed.ncbi.nlm.nih.gov/34333995/>
691. Iba T, Levy JH. The roles of platelets in COVID-19-associated coagulopathy and vaccine-induced immune thrombotic thrombocytopenia. *Trends Cardiovasc Med*. 2022 Jan;32(1):1-9. doi: 10.1016/j.tcm.2021.08.012. Epub 2021 Aug 27. PMID: 34455073; PMCID: PMC8390120. <https://pubmed.ncbi.nlm.nih.gov/34455073/>
692. Dias L, Soares-Dos-Reis R, Meira J, et al. Cerebral Venous Thrombosis after BNT162b2 mRNA SARS-CoV-2 vaccine. *J Stroke Cerebrovasc Dis*. 2021 Aug;30(8):105906. doi: 10.1016/j.jstrokecerebrovasdis.2021.105906. Epub 2021 May 25. PMID: 34111775; PMCID: PMC8148614. <https://pubmed.ncbi.nlm.nih.gov/34111775/>.
693. Kow CS, Hasan SS. Cerebral Venous Thrombosis following COVID-19 Vaccination. *J Stroke Cerebrovasc Dis*. 2021 Oct;30(10):105866. doi: 10.1016/j.jstrokecerebrovasdis.2021.105866. Epub 2021 May 10. PMID: 34045111; PMCID: PMC8108371. <https://pubmed.ncbi.nlm.nih.gov/34045111/>
694. Jamme M, Mosnino E, Hayon J, et al. Fatal cerebral venous sinus thrombosis after COVID-19 vaccination. *Intensive Care Med*. 2021 Jul;47(7):790-791. doi: 10.1007/s00134-021-06425-y. Epub 2021 May 13. PMID: 33983464; PMCID: PMC8117129. <https://pubmed.ncbi.nlm.nih.gov/33983464/>
695. Bikdeli B, Chatterjee S, Arora S, et al. Cerebral Venous Sinus Thrombosis in the U.S. Population, After Adenovirus-Based SARS-CoV-2 Vaccination, and After COVID-19. *J Am Coll Cardiol*. 2021 Jul 27;78(4):408-411. doi: 10.1016/j.jacc.2021.06.001. Epub 2021 Jun 8. PMID: 34116145; PMCID: PMC8186447. <https://pubmed.ncbi.nlm.nih.gov/34116145/>
696. Gürtler L, Seitz R, Schramm W. Cerebral venous thrombosis after COVID-19 vaccination: is the risk of thrombosis increased by intravascular application of the vaccine? *Infection*. 2021 Oct;49(5):1071-1074. doi: 10.1007/s15010-021-01658-x. Epub 2021 Jul 21. PMID: 34286453; PMCID: PMC8294245. <https://pubmed.ncbi.nlm.nih.gov/34286453/>.

697. Syed K, Chaudhary H, Donato A. Central Venous Sinus Thrombosis with Subarachnoid Hemorrhage Following an mRNA COVID-19 Vaccination: Are These Reports Merely Co-Incidental? *Am J Case Rep.* 2021 Sep 3;22:e933397. doi: 10.12659/AJCR.933397. PMID: 34478433; PMCID: PMC8422566. <https://pubmed.ncbi.nlm.nih.gov/34478433/>
698. Ikenberg B, Demleitner AF, Thiele T, et al. Cerebral venous sinus thrombosis after ChAdOx1 nCov-19 vaccination with a misleading first cerebral MRI scan. *Stroke Vasc Neurol.* 2021 Dec;6(4):668-670. doi: 10.1136/svn-2021-001095. Epub 2021 Jul 8. PMID: 34244448; PMCID: PMC8717801. <https://pubmed.ncbi.nlm.nih.gov/34244448/>
699. Clark RT, Johnson L, Billotti J, et al. Early Outcomes of Bivalirudin Therapy for Thrombotic Thrombocytopenia and Cerebral Venous Sinus Thrombosis After Ad26.COV2.S Vaccination. *Ann Emerg Med.* 2021 Oct;78(4):511-514. doi: 10.1016/j.annemergmed.2021.04.035. Epub 2021 Jul 3. PMID: 34226070; PMCID: PMC8253724. <https://pubmed.ncbi.nlm.nih.gov/34226070/>
700. Castelli GP, Pognani C, Sozzi C, et al. Cerebral venous sinus thrombosis associated with thrombocytopenia post-vaccination for COVID-19. *Crit Care.* 2021 Apr 12;25(1):137. doi: 10.1186/s13054-021-03572-y. PMID: 33845870; PMCID: PMC8039796. <https://pubmed.ncbi.nlm.nih.gov/33845870/>.
701. Zakaria Z, Sapiai NA, Ghani ARI. Cerebral venous sinus thrombosis 2 weeks after the first dose of mRNA SARS-CoV-2 vaccine. *Acta Neurochir (Wien).* 2021 Aug;163(8):2359-2362. doi: 10.1007/s00701-021-04860-w. Epub 2021 Jun 8. PMID: 34101024; PMCID: PMC8186353. <https://pubmed.ncbi.nlm.nih.gov/34101024/>.
702. Wiedmann M, Skattør T, Stray-Pedersen A, et al. Vaccine Induced Immune Thrombotic Thrombocytopenia Causing a Severe Form of Cerebral Venous Thrombosis With High Fatality Rate: A Case Series. *Front Neurol.* 2021 Jul 30;12:721146. doi: 10.3389/fneur.2021.721146. PMID: 34393988; PMCID: PMC8363077. <https://pubmed.ncbi.nlm.nih.gov/34393988/>.
703. Gresele P, Momi S, Marcucci R, et al. Interactions of adenoviruses with platelets and coagulation and the vaccine-induced immune thrombotic thrombocytopenia syndrome. *Haematologica.* 2021 Dec 1;106(12):3034-3045. doi: 10.3324/haematol.2021.279289. PMID: 34407607; PMCID: PMC8634187. <https://pubmed.ncbi.nlm.nih.gov/34407607/>.
704. Göbel CH, Heinze A, Karstedt S, et al. Headache Attributed to Vaccination Against COVID-19 (Coronavirus SARS-CoV-2) with the ChAdOx1 nCoV-19 (AZD1222) Vaccine: A Multicenter Observational Cohort Study. *Pain Ther.* 2021 Dec;10(2):1309-1330. doi: 10.1007/s40122-021-00296-3. Epub 2021 Jul 27. PMID: 34313952; PMCID: PMC8314854. <https://pubmed.ncbi.nlm.nih.gov/34313952/>

705. Esba LCA, Al Jeraisy M. Reported adverse effects following COVID-19 vaccination at a tertiary care hospital, focus on cerebral venous sinus thrombosis (CVST). *Expert Rev Vaccines*. 2021 Aug;20(8):1037-1042. doi: 10.1080/14760584.2021.1940145. Epub 2021 Jun 17. PMID: 34092166; PMCID: PMC8220435. <https://pubmed.ncbi.nlm.nih.gov/34092166/>
706. Krzywicka K, Heldner MR, Sánchez van Kammen M, et al. Post-SARS-CoV-2-vaccination cerebral venous sinus thrombosis: an analysis of cases notified to the European Medicines Agency. *Eur J Neurol*. 2021 Nov;28(11):3656-3662. doi: 10.1111/ene.15029. Epub 2021 Aug 4. PMID: 34293217; PMCID: PMC8444640. <https://pubmed.ncbi.nlm.nih.gov/34293217/>
707. Guan CY, Tsai SH, Fan JS, et al. Middle-age Asian male with cerebral venous thrombosis after COVID-19 AstraZeneca vaccination. *Am J Emerg Med*. 2022 Jan;51:427.e3-427.e4. doi: 10.1016/j.ajem.2021.07.011. Epub 2021 Jul 8. PMID: 34274191; PMCID: PMC8265178. <https://pubmed.ncbi.nlm.nih.gov/34274191/>
708. Dutta A, Ghosh R, Bhattacharya D, et al. Anti-PF4 antibody negative cerebral venous sinus thrombosis without thrombocytopenia following immunization with COVID-19 vaccine in an elderly non-comorbid Indian male, managed with conventional heparin-warfarin based anticoagulation. *Diabetes Metab Syndr*. 2021 Jul-Aug;15(4):102184. doi: 10.1016/j.dsx.2021.06.021. Epub 2021 Jun 24. PMID: 34186376; PMCID: PMC8223002. <https://pubmed.ncbi.nlm.nih.gov/34186376/>
709. Pottegård A, Lund LC, Karlstad Ø, et al. Arterial events, venous thromboembolism, thrombocytopenia, and bleeding after vaccination with Oxford-AstraZeneca ChAdOx1-S in Denmark and Norway: population based cohort study. *BMJ*. 2021 May 5;373:n1114. doi: 10.1136/bmj.n1114. PMID: 33952445; PMCID: PMC8097496. <https://pubmed.ncbi.nlm.nih.gov/33952445/>
710. Marchandot B, Carmona A, Trimaille A, et al. Procoagulant microparticles: a possible link between vaccine-induced immune thrombocytopenia (VITT) and cerebral sinus venous thrombosis. *J Thromb Thrombolysis*. 2021 Oct;52(3):689-691. doi: 10.1007/s11239-021-02505-4. Epub 2021 Jun 15. PMID: 34129181; PMCID: PMC8204296. <https://pubmed.ncbi.nlm.nih.gov/34129181/>
711. See I, Su JR, Lale A, et al. US Case Reports of Cerebral Venous Sinus Thrombosis With Thrombocytopenia After Ad26.COV2.S Vaccination, March 2 to April 21, 2021. *JAMA*. 2021 Jun 22;325(24):2448-2456. doi: 10.1001/jama.2021.7517. PMID: 33929487; PMCID: PMC8087975. <https://pubmed.ncbi.nlm.nih.gov/33929487/>
712. De Michele M, Iacobucci M, Chistolini A, et al. Malignant cerebral infarction after ChAdOx1 nCov-19 vaccination: a catastrophic variant of vaccine-induced immune

- thrombotic thrombocytopenia. *Nat Commun.* 2021 Aug 2;12(1):4663. doi: 10.1038/s41467-021-25010-x. PMID: 34341358; PMCID: PMC8329262. <https://pubmed.ncbi.nlm.nih.gov/34341358/>
713. Costentin G, Ozkul-Wermester O, Triquenot A, et al. Acute Ischemic Stroke Revealing ChAdOx1 nCov-19 Vaccine-Induced Immune Thrombotic Thrombocytopenia: Impact on Recanalization Strategy. *J Stroke Cerebrovasc Dis.* 2021 Sep;30(9):105942. doi: 10.1016/j.jstrokecerebrovasdis.2021.105942. Epub 2021 Jun 24. PMID: 34175640. <https://pubmed.ncbi.nlm.nih.gov/34175640/>
714. Lavin M, Elder PT, O'Keefe D, et al. Vaccine-induced immune thrombotic thrombocytopenia (VITT) - a novel clinico-pathological entity with heterogeneous clinical presentations. *Br J Haematol.* 2021 Oct;195(1):76-84. doi: 10.1111/bjh.17613. Epub 2021 Jun 22. PMID: 34159588; PMCID: PMC8444927. <https://pubmed.ncbi.nlm.nih.gov/34159588/>.
715. Gangi A, Mobashwera B, Ganczakowski M, Ayto R. Imaging and Hematologic Findings in Thrombosis and Thrombocytopenia after ChAdOx1 nCoV-19 (AstraZeneca) Vaccination. *Radiology.* 2022 Feb;302(2):319-325. doi: 10.1148/radiol.2021211546. Epub 2021 Aug 17. Erratum in: *Radiology.* 2021 Nov;301(2):E416. PMID: 34402666; PMCID: PMC8488810. <https://pubmed.ncbi.nlm.nih.gov/34402666/>
716. Elrashdy F, Tambuwala MM, Hassan SS, et al. Autoimmunity roots of the thrombotic events after COVID-19 vaccination. *Autoimmun Rev.* 2021 Nov;20(11):102941. doi: 10.1016/j.autrev.2021.102941. Epub 2021 Sep 9. PMID: 34508917; PMCID: PMC8426137. <https://pubmed.ncbi.nlm.nih.gov/34508917/>
717. Lee EJ, Lee AI. Cerebral venous sinus thrombosis after vaccination: the UK experience. *Lancet.* 2021 Sep 25;398(10306):1107-1109. doi: 10.1016/S0140-6736(21)01788-8. Epub 2021 Aug 6. PMID: 34370974; PMCID: PMC8346246. <https://pubmed.ncbi.nlm.nih.gov/34370974/>
718. Şimşek F, Tosunoğlu R. Massive cerebral venous thrombosis and venous watershed infarction as late complications of COVID-19: a case report. *Neurol Sci.* 2021 Nov;42(11):4421-4423. doi: 10.1007/s10072-021-05513-7. Epub 2021 Aug 10. PMID: 34373991; PMCID: PMC8352747. <https://pubmed.ncbi.nlm.nih.gov/34373991/>
719. Chen VM, Curnow JL, Tran HA, et al. Australian and New Zealand approach to diagnosis and management of vaccine-induced immune thrombosis and thrombocytopenia. *Med J Aust.* 2021 Sep 20;215(6):245-249.e1. doi: 10.5694/mja2.51229. Epub 2021 Sep 6. Erratum in: *Med J Aust.* 2021 Nov 15;215(10):453. PMID: 34490632; PMCID: PMC8661608. <https://pubmed.ncbi.nlm.nih.gov/34490632/>

720. Sørvoll IH, Horvei KD, Ernsten SL, et al. An observational study to identify the prevalence of thrombocytopenia and anti-PF4/polyanion antibodies in Norwegian health care workers after COVID-19 vaccination. *J Thromb Haemost.* 2021 Jul;19(7):1813-1818. doi: 10.1111/jth.15352. Epub 2021 May 18. PMID: 33909350; PMCID: PMC8237070. <https://pubmed.ncbi.nlm.nih.gov/33909350/>
721. Román GC, Gracia F, Torres A, Palacios A, et al. Acute Transverse Myelitis (ATM):Clinical Review of 43 Patients With COVID-19-Associated ATM and 3 Post-Vaccination ATM Serious Adverse Events With the ChAdOx1 nCoV-19 Vaccine (AZD1222). *Front Immunol.* 2021 Apr 26;12:653786. doi: 10.3389/fimmu.2021.653786. PMID: 33981305; PMCID: PMC8107358. <https://pubmed.ncbi.nlm.nih.gov/33981305/>.
722. Hyun H, Song JY, Seong H, et al. Polyarthralgia and Myalgia Syndrome after ChAdOx1 nCoV-19 Vaccination. *J Korean Med Sci.* 2021 Aug 30;36(34):e245. doi: 10.3346/jkms.2021.36.e245. PMID: 34463066; PMCID: PMC8405407. <https://pubmed.ncbi.nlm.nih.gov/34463066/>
723. Trogstad L, Robertson AH, Mjaaland S, et al. Association between ChAdOx1 nCoV-19 vaccination and bleeding episodes: Large population-based cohort study. *Vaccine.* 2021 Sep 24;39(40):5854-5857. doi: 10.1016/j.vaccine.2021.08.055. Epub 2021 Aug 31. PMID: 34479760; PMCID: PMC8406020. <https://pubmed.ncbi.nlm.nih.gov/34479760/>.
724. Vaira LA, Podda L, Doneddu P, et al. Secondary thrombocytopenia after SARS-CoV-2 vaccine: Report of a case of hemorrhage and hematoma after minor oral surgery. *J Stomatol Oral Maxillofac Surg.* 2021 Jul 24:S2468-7855(21)00156-7. doi: 10.1016/j.jormas.2021.07.010. Epub ahead of print. PMID: 34314875; PMCID: PMC8310415. <https://pubmed.ncbi.nlm.nih.gov/34314875/>.
725. Gabarin N, Patterson S, Pai M, et al. Venous Thromboembolism and Mild Thrombocytopenia after ChAdOx1 nCoV-19 Vaccination. *Thromb Haemost.* 2021 Dec;121(12):1677-1680. doi: 10.1055/a-1585-6182. Epub 2021 Aug 12. PMID: 34384129; PMCID: PMC8632250. <https://pubmed.ncbi.nlm.nih.gov/34384129/>
726. Douxfils J, Vayne C, Pouplard C, et al. Fatal exacerbation of ChadOx1-nCoV-19-induced thrombotic thrombocytopenia syndrome after initial successful therapy with intravenous immunoglobulins - a rationale for monitoring immunoglobulin G levels. *Haematologica.* 2021 Aug 12. doi: 10.3324/haematol.279509. Epub ahead of print. PMID: 34382387. <https://pubmed.ncbi.nlm.nih.gov/34382387/>
727. Villa M, Díaz-Crespo F, Pérez de José A, et al. A case of ANCA-associated vasculitis after AZD1222 (Oxford-AstraZeneca) SARS-CoV-2 vaccination: casualty or causality? *Kidney Int.* 2021 Oct;100(4):937-938. doi: 10.1016/j.kint.2021.07.026. Epub 2021 Aug 17. PMID: 34416184; PMCID: PMC8372491. <https://pubmed.ncbi.nlm.nih.gov/34416184/>.

728. Mendes-de-Almeida DP, Martins-Gonçalves R, Morato-Santos R, et al. Intracerebral hemorrhage associated with vaccine-induced thrombotic thrombocytopenia following ChAdOx1 nCOVID-19 vaccine in a pregnant woman. *Haematologica*. 2021 Nov 1;106(11):3025-3028. doi: 10.3324/haematol.2021.279407. PMID: 34261297; PMCID: PMC8561298. <https://pubmed.ncbi.nlm.nih.gov/34261297/>
729. Bonato S, Artoni A, Lecchi A, et al. Massive cerebral venous thrombosis due to vaccine-induced immune thrombotic thrombocytopenia. *Haematologica*. 2021 Nov 1;106(11):3021-3024. doi: 10.3324/haematol.2021.279246. PMID: 34261296; PMCID: PMC8561270. <https://pubmed.ncbi.nlm.nih.gov/34261296/>
730. Anupama YJ, Patel RGN, Vankalakunti M. Nephrotic Syndrome Following ChAdOx1 nCoV-19 Vaccine Against SARS-CoV-2. *Kidney Int Rep*. 2021 Aug;6(8):2248. doi: 10.1016/j.ekir.2021.06.024. Epub 2021 Jul 6. PMID: 34250318; PMCID: PMC8257404. <https://pubmed.ncbi.nlm.nih.gov/34250318/>.
731. Underdown MJ, Nuss R. Thrombocytopenia in a teen with sickle cell disease following COVID-19 vaccination. *Pediatr Blood Cancer*. 2021 Dec;68(12):e29271. doi: 10.1002/pbc.29271. Epub 2021 Jul 31. PMID: 34331506; PMCID: PMC8441926. <https://pubmed.ncbi.nlm.nih.gov/34331506/>
732. Salih F, Schönborn L, Kohler S, et al. Vaccine-Induced Thrombocytopenia with Severe Headache. *N Engl J Med*. 2021 Nov 25;385(22):2103-2105. doi: 10.1056/NEJMc2112974. Epub 2021 Sep 15. PMID: 34525282; PMCID: PMC8522796. <https://pubmed.ncbi.nlm.nih.gov/34525282/>
733. Gadi, SRV, Brunker, PAR, Al-Samkari, H, Sykes, DB, Saff, RR, Lo, J, et al. Severe autoimmune hemolytic anemia following receipt of SARS-CoV-2 mRNA vaccine. *Transfusion*. 2021; 61: 3267–3271. <https://www.medrxiv.org/content/10.1101/2021.09.13.21262182v1.full?s=09>.
734. Gadi SRV, Brunker PAR, Al-Samkari H, et al. Severe autoimmune hemolytic anemia following receipt of SARS-CoV-2 mRNA vaccine. *Transfusion*. 2021 Nov;61(11):3267-3271. doi: 10.1111/trf.16672. Epub 2021 Oct 3. PMID: 34549821; PMCID: PMC8661722. <https://onlinelibrary.wiley.com/doi/10.1111/trf.16672>
735. Li C, Chen Y, Zhao Y, et al. Corrigendum to: Intravenous Injection of Coronavirus Disease 2019 (COVID-19) mRNA Vaccine Can Induce Acute Myopericarditis in Mouse Model. *Clin Infect Dis*. 2021 Dec 16;73(12):2372-2373. doi: 10.1093/cid/ciab941. Erratum for: *Clin Infect Dis*. 2021 Aug 18;: PMID: 34849654; PMCID: PMC8690168. <https://t.co/j0IEM8cMXI>
736. Rose J, McCullough PA. WITHDRAWN: A Report on Myocarditis Adverse Events in the U.S. Vaccine Adverse Events Reporting System (VAERS) in Association with COVID-19 Injectable Biological Products. *Curr Probl Cardiol*. 2021 Sep 30:101011. doi:

- 10.1016/j.cpcardiol.2021.101011. Epub ahead of print. PMID: 34601006; PMCID: PMC8483988.
<https://pubmed.ncbi.nlm.nih.gov/34601006/>
737. Barda N, Dagan N, Ben-Shlomo Y, et al. Safety of the BNT162b2 mRNA Covid-19 Vaccine in a Nationwide Setting. *N Engl J Med*. 2021 Sep 16;385(12):1078-1090. doi: 10.1056/NEJMoa2110475. Epub 2021 Aug 25. PMID: 34432976; PMCID: PMC8427535.
<https://www.nejm.org/doi/full/10.1056/NEJMoa2110475>
 738. Pan L, Zhang Y, Cui Y, Wu X. Bilateral uveitis after inoculation with COVID-19 vaccine: A case report. *Int J Infect Dis*. 2021 Dec;113:116-118. doi: 10.1016/j.ijid.2021.09.075. Epub 2021 Sep 30. PMID: 34601147; PMCID: PMC8482656. <https://www.sciencedirect.com/science/article/pii/S1201971221007797>
 739. Høeg T, Krug A, Stevenson J. Myocarditis associated with SARS-CoV-2 mRNA vaccination in children aged 12 to 17 years: stratified analysis of a national database. *MedRx*. 10.1101/2021.08.30.21262866 <https://www.medrxiv.org/content/10.1101/2021.08.30.21262866v1>.
 740. Liu J, Wang J, Xu J, et al. Comprehensive investigations revealed consistent pathophysiological alterations after vaccination with COVID-19 vaccines. *Cell Discov*. 2021 Oct 26;7(1):99. doi: 10.1038/s41421-021-00329-3. PMID: 34697287; PMCID: PMC8546144. <https://www.nature.com/articles/s41421-021-00329-3>
 741. Finsterer J. Lobar bleeding with ventricular rupture shortly after first dosage of an mRNA-based SARS-CoV-2 vaccine. *Brain Hemorrhages*. 2021 Oct 28. doi: 10.1016/j.hest.2021.10.001. Epub ahead of print. PMID: 34729467; PMCID: PMC8553377. <https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC8553377/>
 742. Grundy S. Mrna COVID vaccines dramatically increase endothelial inflammatory markers and risk of Acute Coronary Syndrome as measured by PULS cardiac testing: a caution. *Circulation*. Abstract 10712. https://www.ahajournals.org/doi/10.1161/circ.144.suppl_1.10712
 743. Baker AT, Boyd RJ, Sarkar D, et al. ChAdOx1 interacts with CAR and PF4 with implications for thrombosis with thrombocytopenia syndrome. *Sci Adv*. 2021 Dec 3;7(49):eabl8213. doi: 10.1126/sciadv.abl8213. Epub 2021 Dec 1. PMID: 34851659; PMCID: PMC8635433. <https://www.science.org/doi/10.1126/sciadv.abl8213>
 744. Rodriguez EVC, Bouazza FZ, Dauby N, et al. Fatal vaccine-induced immune thrombotic thrombocytopenia (VITT) post Ad26.COVS.2.S: first documented case outside US. *Infection*. 2021 Oct 9:1–6. doi: 10.1007/s15010-021-01712-8. Epub ahead of print. PMID: 34626338; PMCID: PMC8501343. <https://pubmed.ncbi.nlm.nih.gov/34626338/>

745. Greinacher A, Thiele T, Warkentin TE, et al. A Prothrombotic Thrombocytopenic Disorder Resembling Heparin-Induced Thrombocytopenia Following Coronavirus-19 Vaccination. Research Square; 2021. DOI: 10.21203/rs.3.rs-362354/v1
746. Santin AD. VITT after ChAdOx1 nCoV-19 Vaccination. N Engl J Med. 2021 Dec 2;385(23):2202-2203. doi: 10.1056/NEJMc2111026. Epub 2021 Nov 3. PMID: 34731555. <https://pubmed.ncbi.nlm.nih.gov/34731555/>
747. Lavin M, Elder PT, O'Keeffe D, Enright H, et al. Vaccine-induced immune thrombotic thrombocytopenia (VITT) - a novel clinico-pathological entity with heterogeneous clinical presentations. Br J Haematol. 2021 Oct;195(1):76-84. doi: 10.1111/bjh.17613. Epub 2021 Jun 22. PMID: 34159588; PMCID: PMC8444927. <https://pubmed.ncbi.nlm.nih.gov/34159588/>
748. Kenda J, Lovrić D, Škerget M, Milivojević N. Treatment of ChAdOx1 nCoV-19 Vaccine-Induced Immune Thrombotic Thrombocytopenia Related Acute Ischemic Stroke. J Stroke Cerebrovasc Dis. 2021 Nov;30(11):106072. doi: 10.1016/j.jstrokecerebrovasdis.2021.106072. Epub 2021 Aug 28. PMID: 34461442; PMCID: PMC8397593. <https://pubmed.ncbi.nlm.nih.gov/34461442/>
749. Garg RK, Paliwal VK. Spectrum of neurological complications following COVID-19 vaccination. Neurol Sci. 2022 Jan;43(1):3-40. doi: 10.1007/s10072-021-05662-9. Epub 2021 Oct 31. PMID: 34719776; PMCID: PMC8557950. <https://pubmed.ncbi.nlm.nih.gov/34719776/>.
750. Lee EJ, Lee AI. Cerebral venous sinus thrombosis after vaccination: the UK experience. Lancet. 2021 Sep 25;398(10306):1107-1109. doi: 10.1016/S0140-6736(21)01788-8. Epub 2021 Aug 6. PMID: 34370974; PMCID: PMC8346246. <https://pubmed.ncbi.nlm.nih.gov/34370974/>
751. Kawano H, Hashimoto Y, Hirano T. [Cerebral vein/venous sinus thrombosis with thrombocytopenia syndrome after COVID-19 vaccination]. Rinsho Shinkeigaku. 2021 Sep 28;61(9):594-601. Japanese. doi: 10.5692/clinicalneuro.cn-001646. Epub 2021 Aug 7. PMID: 34373413. <https://pubmed.ncbi.nlm.nih.gov/34373413/>
752. Strobel D, Haberkamp S, Zundler S. Portal Vein Thrombosis due to Vaccine-Induced Immune Thrombotic Thrombocytopenia (VITT) after Covid Vaccination with ChAdOx1 nCoV-19. Ultraschall Med. 2021 Oct;42(5):551-552. English. doi: 10.1055/a-1579-9303. Epub 2021 Oct 1. PMID: 34598301. <https://pubmed.ncbi.nlm.nih.gov/34598301/>
753. Waraich A, Williams G. Haematuria, a widespread petechial rash, and headaches following the Oxford AstraZeneca ChAdOx1 nCoV-19 Vaccination. BMJ Case Rep. 2021 Oct 7;14(10):e245440. doi: 10.1136/bcr-2021-245440. PMID: 34620638; PMCID: PMC8499345. <https://pubmed.ncbi.nlm.nih.gov/34620638/>

754. Chiang CY, Yu WL, Kan WC, et al. Myocardial Infarction and Azygos Vein Thrombosis After ChAdOx1 nCoV-19 Vaccination in a Hemodialysis Patient. *Cureus*. 2021 Sep 30;13(9):e18390. doi: 10.7759/cureus.18390. PMID: 34650896; PMCID: PMC8489656. <https://pubmed.ncbi.nlm.nih.gov/34650896/>
755. Crane P, Wong C, Mehta N, et al. Takotsubo (stress) cardiomyopathy after ChAdOx1 nCoV-19 vaccination. *BMJ Case Rep*. 2021 Oct 8;14(10):e246580. doi: 10.1136/bcr-2021-246580. PMID: 34625447; PMCID: PMC8504353. <https://pubmed.ncbi.nlm.nih.gov/34625447/>
756. Michiels Y, Houhou-Fidouh N, Collin G, et al. Humoral Response Induced by Prime-Boost Vaccination with the ChAdOx1 nCoV-19 and mRNA BNT162b2 Vaccines in a Teriflunomide-Treated Multiple Sclerosis Patient. *Vaccines (Basel)*. 2021 Oct 6;9(10):1140. doi: 10.3390/vaccines9101140. PMID: 34696248; PMCID: PMC8540857. <https://pubmed.ncbi.nlm.nih.gov/34696248/>
757. James J, Jose J, Gafoor VA, et al. Guillain-Barré syndrome following ChAdOx1 nCoV-19 COVID-19 vaccination: A case series. *Neurol Clin Neurosci*. 2021 Sep;9(5):402-405. doi: 10.1111/ncn3.12537. Epub 2021 Jul 21. PMID: 34548920; PMCID: PMC8447386. <https://pubmed.ncbi.nlm.nih.gov/34548920/>
758. Major A, Carll T, Chan CW, et al. Refractory vaccine-induced immune thrombotic thrombocytopenia (VITT) managed with delayed therapeutic plasma exchange (TPE). *J Clin Apher*. 2022 Feb;37(1):117-121. doi: 10.1002/jca.21945. Epub 2021 Oct 21. PMID: 34672380. <https://pubmed.ncbi.nlm.nih.gov/34672380/>.
759. Purkayastha P, Mckechnie C, Kalkur P, et al. Rare case of COVID-19 vaccine-associated intracranial haemorrhage with venous sinus thrombosis. *BMJ Case Rep*. 2021 Sep 23;14(9):e245092. doi: 10.1136/bcr-2021-245092. PMID: 34556531; PMCID: PMC8461674. <https://pubmed.ncbi.nlm.nih.gov/34556531/>.
760. García-Azorín D, Do TP, Gantenbein AR, et al. Delayed headache after COVID-19 vaccination: a red flag for vaccine induced cerebral venous thrombosis. *J Headache Pain*. 2021 Sep 17;22(1):108. doi: 10.1186/s10194-021-01324-5. PMID: 34535076; PMCID: PMC8446734. <https://pubmed.ncbi.nlm.nih.gov/34535076/>.
761. Pavord S, Scully M, Hunt BJ, et al. Clinical Features of Vaccine-Induced Immune Thrombocytopenia and Thrombosis. *N Engl J Med*. 2021 Oct 28;385(18):1680-1689. doi: 10.1056/NEJMoa2109908. Epub 2021 Aug 11. PMID: 34379914. <https://pubmed.ncbi.nlm.nih.gov/34379914/>.

762. Hwang J, Park SH, Lee SW, et al. Predictors of mortality in thrombotic thrombocytopenia after adenoviral COVID-19 vaccination: the FAPIC score. *Eur Heart J*. 2021 Oct 14;42(39):4053-4063. doi: 10.1093/eurheartj/ehab592. PMID: 34545400; PMCID: PMC8500026. <https://pubmed.ncbi.nlm.nih.gov/34545400/>
763. Maramattom BV, Philips G, Thomas J, et al. Inflammatory myositis after ChAdOx1 vaccination. *Lancet Rheumatol*. 2021 Nov;3(11):e747-e749. doi: 10.1016/S2665-9913(21)00312-X. Epub 2021 Sep 23. PMID: 34585145; PMCID: PMC8460178. <https://pubmed.ncbi.nlm.nih.gov/34585145/>
764. Kim G, Choi EJ, Park HS, et al. A Case Report of Immune Thrombocytopenia after ChAdOx1 nCoV-19 Vaccination. *J Korean Med Sci*. 2021 Nov 8;36(43):e306. doi: 10.3346/jkms.2021.36.e306. PMID: 34751013; PMCID: PMC8575766. <https://pubmed.ncbi.nlm.nih.gov/34751013/>.
765. Hsiao YT, Tsai MJ, Chen YH, Hsu CF. Acute Transverse Myelitis after COVID-19 Vaccination. *Medicina (Kaunas)*. 2021 Sep 25;57(10):1010. doi: 10.3390/medicina57101010. PMID: 34684047; PMCID: PMC8540274. <https://pubmed.ncbi.nlm.nih.gov/34684047/>.
766. Haimei MA. Concern About the Adverse Effects of Thrombocytopenia and Thrombosis After Adenovirus-Vectored COVID-19 Vaccination. *Clin Appl Thromb Hemost*. 2021 Jan-Dec;27:10760296211040110. doi: 10.1177/10760296211040110. PMID: 34541935; PMCID: PMC8642058. <https://pubmed.ncbi.nlm.nih.gov/34541935/>
767. de Mélo Silva ML Jr, Lopes DP. Large hemorrhagic stroke after ChAdOx1 nCoV-19 vaccination: A case report. *Acta Neurol Scand*. 2021 Dec;144(6):717-718. doi: 10.1111/ane.13505. Epub 2021 Jul 17. PMID: 34273119; PMCID: PMC8444739. <https://pubmed.ncbi.nlm.nih.gov/34273119/>
768. Walter U, Volmer E, Wittstock M, et al. Hirnvenen- und Sinusthrombose nach COVID-19-Schutzimpfung : Neurologisch-radiologisches Prozedere [Cerebral venous sinus thrombosis after COVID-19 vaccination : Neurological and radiological management]. *Radiologe*. 2021 Oct;61(10):923-932. German. doi: 10.1007/s00117-021-00887-3. Epub 2021 Jul 29. PMID: 34327553; PMCID: PMC8320717. <https://pubmed.ncbi.nlm.nih.gov/34327553/>.
769. Blauenfeldt RA, Kristensen SR, Ernstsén SL, et al. Thrombocytopenia with acute ischemic stroke and bleeding in a patient newly vaccinated with an adenoviral vector-based COVID-19 vaccine. *J Thromb Haemost*. 2021 Jul;19(7):1771-1775. doi: 10.1111/jth.15347. Epub 2021 May 5. PMID: 33877737; PMCID: PMC8250306. <https://pubmed.ncbi.nlm.nih.gov/33877737/>

770. Wilting FNH, Kotsopoulos AMM, Platteel ACM, et al. Intracerebral Hemorrhage and Thrombocytopenia After AstraZeneca COVID-19 Vaccine: Clinical and Diagnostic Challenges of Vaccine-Induced Thrombotic Thrombocytopenia. *Cureus*. 2021 Sep 1;13(9):e17637. doi: 10.7759/cureus.17637. PMID: 34646685; PMCID: PMC8486363. <https://pubmed.ncbi.nlm.nih.gov/34646685/>
771. Leclerc S, Royal V, Lamarche C, Laurin LP. Minimal Change Disease With Severe Acute Kidney Injury Following the Oxford-AstraZeneca COVID-19 Vaccine: A Case Report. *Am J Kidney Dis*. 2021 Oct;78(4):607-610. doi: 10.1053/j.ajkd.2021.06.008. Epub 2021 Jul 7. PMID: 34242687; PMCID: PMC8260495. <https://pubmed.ncbi.nlm.nih.gov/34242687/>.
772. Fousse M, Schub D, Merzou F, et al. Case report: cerebral sinus vein thrombosis in two patients with AstraZeneca SARS-CoV-2 vaccination. *J Neurol*. 2022 Feb;269(2):583-586. doi: 10.1007/s00415-021-10731-2. Epub 2021 Oct 5. PMID: 34609603; PMCID: PMC8491181. <https://pubmed.ncbi.nlm.nih.gov/34609603/>
773. Leerunyakul K, Pakornphadungsit K, Suchonwanit P. Case Report: Pityriasis Rosea-Like Eruption Following COVID-19 Vaccination. *Front Med (Lausanne)*. 2021 Sep 7;8:752443. doi: 10.3389/fmed.2021.752443. PMID: 34557507; PMCID: PMC8452904. <https://pubmed.ncbi.nlm.nih.gov/34557507/>
774. Tan WY, Yusof Khan AHK, Mohd Yaakob MN, et al. Longitudinal extensive transverse myelitis following ChAdOx1 nCoV-19 vaccine: a case report. *BMC Neurol*. 2021 Oct 12;21(1):395. doi: 10.1186/s12883-021-02427-x. PMID: 34641797; PMCID: PMC8506086. <https://pubmed.ncbi.nlm.nih.gov/34641797/>.
775. Miqdadi A, Herrag M. Acute Eosinophilic Pneumonia Associated With the Anti-COVID-19 Vaccine AZD1222. *Cureus*. 2021 Oct 21;13(10):e18959. doi: 10.7759/cureus.18959. PMID: 34812326; PMCID: PMC8604432. <https://pubmed.ncbi.nlm.nih.gov/34812326/>.
776. Villa M, Díaz-Crespo F, Pérez de José A, et al. A case of ANCA-associated vasculitis after AZD1222 (Oxford-AstraZeneca) SARS-CoV-2 vaccination: casualty or causality? *Kidney Int*. 2021 Oct;100(4):937-938. doi: 10.1016/j.kint.2021.07.026. Epub 2021 Aug 17. PMID: 34416184; PMCID: PMC8372491. <https://pubmed.ncbi.nlm.nih.gov/34416184/>
777. Crea F. Thrombosis in peripheral artery disease and thrombotic thrombocytopenia after adenoviral COVID-19 vaccination. *Eur Heart J*. 2021 Oct 14;42(39):3995-3999. doi: 10.1093/eurheartj/ehab712. PMID: 34649281; PMCID: PMC8524636. <https://pubmed.ncbi.nlm.nih.gov/34649281/>.
778. Bennett C, Chambers LM, Son J, et al. Newly diagnosed immune thrombocytopenia in a pregnant patient after coronavirus disease 2019 vaccination. *J Obstet Gynaecol Res*. 2021 Nov;47(11):4077-4080. doi: 10.1111/jog.14978. Epub 2021 Aug 22. PMID: 34420249; PMCID: PMC8661984. <https://pubmed.ncbi.nlm.nih.gov/34420249/>

779. Majid I, Mearaj S. Sweet syndrome after Oxford-AstraZeneca COVID-19 vaccine (AZD1222) in an elderly female. *Dermatol Ther.* 2021 Nov;34(6):e15146. doi: 10.1111/dth.15146. Epub 2021 Oct 7. PMID: 34590397; PMCID: PMC8646808. <https://pubmed.ncbi.nlm.nih.gov/34590397/>
780. Konu YR, Gbeasor-Komlanvi FA, Yerima M, et al. Prevalence of severe adverse events among health professionals after receiving the first dose of the ChAdOx1 nCoV-19 coronavirus vaccine (Covishield) in Togo, March 2021. *Arch Public Health.* 2021 Nov 24;79(1):207. doi: 10.1186/s13690-021-00741-x. PMID: 34819146; PMCID: PMC8611394. <https://pubmed.ncbi.nlm.nih.gov/34819146/>.
781. Matar E, Manser D, Spies JM, et al. Acute Hemichorea-Hemiballismus Following COVID-19 (AZD1222) Vaccination. *Mov Disord.* 2021 Dec;36(12):2714-2715. doi: 10.1002/mds.28796. Epub 2021 Sep 28. PMID: 34581453; PMCID: PMC8661968. <https://pubmed.ncbi.nlm.nih.gov/34581453/>
782. Rossi A, Magri F, Michelini S, et al. Recurrence of alopecia areata after covid-19 vaccination: A report of three cases in Italy. *J Cosmet Dermatol.* 2021 Dec;20(12):3753-3757. doi: 10.1111/jocd.14581. Epub 2021 Nov 6. PMID: 34741583. <https://pubmed.ncbi.nlm.nih.gov/34741583/>
783. Ardalan M, Moslemi H, Shafiei S, et al. Herpes-like skin lesion after AstraZeneca vaccination for COVID-19: A case report. *Clin Case Rep.* 2021 Oct 4;9(10):e04883. doi: 10.1002/ccr3.4883. PMID: 34631069; PMCID: PMC8489397. <https://pubmed.ncbi.nlm.nih.gov/34631069/>
784. Dalan R, Boehm BO. Thrombosis post COVID-19 vaccinations: Potential link to ACE pathways. *Thromb Res.* 2021 Oct;206:137-138. doi: 10.1016/j.thromres.2021.08.018. Epub 2021 Aug 28. PMID: 34479129; PMCID: PMC8397505. <https://pubmed.ncbi.nlm.nih.gov/34479129/>
785. Underdown MJ, Nuss R. Thrombocytopenia in a teen with sickle cell disease following COVID-19 vaccination. *Pediatr Blood Cancer.* 2021 Dec;68(12):e29271. doi: 10.1002/pbc.29271. Epub 2021 Jul 31. PMID: 34331506; PMCID: PMC8441926. <https://pubmed.ncbi.nlm.nih.gov/34331506/>
786. Sandhu S, Bhatnagar A, Kumar H, et al. Leukocytoclastic vasculitis as a cutaneous manifestation of ChAdOx1 nCoV-19 corona virus vaccine (recombinant). *Dermatol Ther.* 2021 Nov;34(6):e15141. doi: 10.1111/dth.15141. Epub 2021 Oct 5. PMID: 34546608; PMCID: PMC8646583. <https://pubmed.ncbi.nlm.nih.gov/34546608/>

787. Lin CY, Huang LY, Wu KA, et al. Response to bilateral adrenal haemorrhage in the differential diagnosis of abdominal pain in vaccine-induced thrombosis with thrombocytopenia. *QJM*. 2022 Jan 9;114(12):910-911. doi: 10.1093/qjmed/hcab239. PMID: 34546343; PMCID: PMC8500008. <https://pubmed.ncbi.nlm.nih.gov/34546343/>
788. Sepahvand M, Yazdi N, Rohani M, et al. Cervical longitudinally extensive myelitis after vaccination with inactivated virus-based COVID-19 vaccine. *Radiol Case Rep*. 2022 Feb;17(2):303-305. doi: 10.1016/j.radcr.2021.10.053. Epub 2021 Nov 25. PMID: 34849183; PMCID: PMC8614237. <https://pubmed.ncbi.nlm.nih.gov/34849183/>
789. Shahriharahkoshan S, Gagnon LP, Mathieu S. Cutaneous Leukocytoclastic Vasculitis Induction Following ChAdOx1 nCoV-19 Vaccine. *Cureus*. 2021 Oct 24;13(10):e19005. doi: 10.7759/cureus.19005. PMID: 34853744; PMCID: PMC8609955. <https://pubmed.ncbi.nlm.nih.gov/34853744/>.
790. Kherlopian A, Zhao C, Ge L, et al. A case of toxic epidermal necrolysis after ChAdOx1 nCov-19 (AZD1222) vaccination. *Australas J Dermatol*. 2021 Nov 9;10.1111/ajd.13742. doi: 10.1111/ajd.13742. Epub ahead of print. PMID: 34751429; PMCID: PMC8653013. <https://pubmed.ncbi.nlm.nih.gov/34751429/>.
791. Ng XL, Betzler BK, Testi I, et al. Ocular Adverse Events After COVID-19 Vaccination. *Ocul Immunol Inflamm*. 2021 Aug 18;29(6):1216-1224. doi: 10.1080/09273948.2021.1976221. Epub 2021 Sep 24. PMID: 34559576; PMCID: PMC8477588. <https://pubmed.ncbi.nlm.nih.gov/34559576/>
792. Uvais NA. Depression following ChAdOx1-S/nCoV-19 vaccine. *Eur J Psychiatry*. 2021 Sep 27. doi: 10.1016/j.ejpsy.2021.08.001. Epub ahead of print. PMID: 34608345; PMCID: PMC8482696. <https://pubmed.ncbi.nlm.nih.gov/34608345/>.
793. Masset C, Lebot-Bouras S, Branchereau J, et al. Pancreas allograft rejection occurring after ChAdOx1 nCoV-19 vaccine. *Diabetes Metab*. 2021 Nov 12;48(3):101303. doi: 10.1016/j.diabet.2021.101303. Epub ahead of print. PMID: 34781027; PMCID: PMC8586722. <https://pubmed.ncbi.nlm.nih.gov/34781027/>
794. Kulkarni PA, Prasad V. Understanding risk of thrombosis with thrombocytopenia syndrome after Ad26.COV2.S vaccination. *Front Med*. 2021 Dec;15(6):938-941. doi: 10.1007/s11684-021-0895-9. Epub 2021 Sep 30. PMID: 34595694; PMCID: PMC8482953. <https://pubmed.ncbi.nlm.nih.gov/34595694/>
795. Rerknimitr P, Puaratanaarunkon T, Wongtada C, et al. Cutaneous adverse reactions from 35,229 doses of Sinovac and AstraZeneca COVID-19 vaccination: a prospective cohort study in healthcare workers. *J Eur Acad Dermatol Venereol*. 2021 Oct 17;10.1111/jdv.17761. doi: 10.1111/jdv.17761. Epub ahead of print. PMID: 34661934; PMCID: PMC8657530. <https://pubmed.ncbi.nlm.nih.gov/34661934/>

796. Gardellini A, Guidotti F, Maino E, et al. Severe immune thrombocytopenia after COVID-19 vaccination: Report of four cases and review of the literature. *Blood Cells Mol Dis.* 2021 Dec;92:102615. doi: 10.1016/j.bcmd.2021.102615. Epub 2021 Oct 7. PMID: 34653943; PMCID: PMC8494992. <https://pubmed.ncbi.nlm.nih.gov/34653943/>.
797. Dijk WEMV, Schutgens REG. Relapse of immune thrombocytopenia after COVID-19 vaccination. *Eur J Haematol.* 2022 Jan;108(1):84-85. doi: 10.1111/ejh.13713. Epub 2021 Oct 17. PMID: 34591991; PMCID: PMC8652889. <https://pubmed.ncbi.nlm.nih.gov/34591991/>
798. Violi F, Cammisotto V, Pastori D, et al. Thrombosis in pre- and post-vaccination phase of COVID-19. *Eur Heart J Suppl.* 2021 Oct 8;23(Suppl E):E184-E188. doi: 10.1093/eurheartj/suab118. PMID: 34650382; PMCID: PMC8503327. <https://pubmed.ncbi.nlm.nih.gov/34650382/>
799. Stassi C, Mondello C, Baldino G, et al. An Insight into the Role of Postmortem Immunohistochemistry in the Comprehension of the Inflammatory Pathophysiology of COVID-19 Disease and Vaccine-Related Thrombotic Adverse Events: A Narrative Review. *Int J Mol Sci.* 2021 Nov 6;22(21):12024. doi: 10.3390/ijms222112024. PMID: 34769454; PMCID: PMC8584583. <https://pubmed.ncbi.nlm.nih.gov/34769454/>
800. John NA, John J, Kamble P, et al. COVID 19 vaccine in patients of hypercoagulable disorders: a clinical perspective. *Horm Mol Biol Clin Investig.* 2021 Nov 17. doi: 10.1515/hmbci-2021-0037. Epub ahead of print. PMID: 34786893. <https://pubmed.ncbi.nlm.nih.gov/34786893/>
801. Graf T, Thiele T, Klingebiel R, et al. Immediate high-dose intravenous immunoglobulins followed by direct thrombin-inhibitor treatment is crucial for survival in Sars-Covid-19-adenoviral vector vaccine-induced immune thrombotic thrombocytopenia VITT with cerebral sinus venous and portal vein thrombosis. *J Neurol.* 2021 Dec;268(12):4483-4485. doi: 10.1007/s00415-021-10599-2. Epub 2021 May 22. PMID: 34023956; PMCID: PMC8140563. <https://pubmed.ncbi.nlm.nih.gov/34023956/>.
802. Ali Waggiallah H. Thrombosis Formation after COVID-19 Vaccination Immunological Aspects: Review Article. *Saudi J Biol Sci.* 2021 Sep 30. doi: 10.1016/j.sjbs.2021.09.065. Epub ahead of print. PMID: 34629931; PMCID: PMC8489518. <https://pubmed.ncbi.nlm.nih.gov/34629931/>
803. Gangi A, Mobashwera B, Ganczakowski M, et al. Imaging and Hematologic Findings in Thrombosis and Thrombocytopenia after ChAdOx1 nCoV-19 (AstraZeneca) Vaccination. *Radiology.* 2022 Feb;302(2):319-325. doi: 10.1148/radiol.2021211546. Epub 2021 Aug 17. Erratum in: *Radiology.* 2021 Nov;301(2):E416. PMID: 34402666; PMCID: PMC8488810. <https://pubmed.ncbi.nlm.nih.gov/34402666/>

804. Sriwastava S, Shrestha AK, Khalid SH, et al. Spectrum of Neuroimaging Findings in Post-COVID-19 Vaccination: A Case Series and Review of Literature. *Neurol Int.* 2021 Nov 19;13(4):622-639. doi: 10.3390/neurolint13040061. PMID: 34842783; PMCID: PMC8628885. <https://pubmed.ncbi.nlm.nih.gov/34842783/>
805. Cugno M, Consonni D, Lombardi A, et al. Increased Risk of Urticaria/Angioedema after BNT162b2 mRNA COVID-19 Vaccine in Health Care Workers Taking ACE Inhibitors. *Vaccines (Basel)*. 2021 Sep 11;9(9):1011. doi: 10.3390/vaccines9091011. PMID: 34579248; PMCID: PMC8473401. <https://pubmed.ncbi.nlm.nih.gov/34579248/>
806. Finsterer J. Neurological side effects of SARS-CoV-2 vaccinations. *Acta Neurol Scand.* 2022 Jan;145(1):5-9. doi: 10.1111/ane.13550. Epub 2021 Nov 8. PMID: 34750810; PMCID: PMC8653194. <https://pubmed.ncbi.nlm.nih.gov/34750810/>
807. Kircheis R. Coagulopathies after Vaccination against SARS-CoV-2 May Be Derived from a Combined Effect of SARS-CoV-2 Spike Protein and Adenovirus Vector-Triggered Signaling Pathways. *Int J Mol Sci.* 2021 Oct 6;22(19):10791. doi: 10.3390/ijms221910791. PMID: 34639132; PMCID: PMC8509779. <https://pubmed.ncbi.nlm.nih.gov/34639132/>
808. Ifeanyi N, Chinenye N, Oladiran O, et al. Isolated pulmonary embolism following COVID vaccination: 2 case reports and a review of post-acute pulmonary embolism complications and follow-up. *J Community Hosp Intern Med Perspect.* 2021 Nov 15;11(6):877-879. doi: 10.1080/20009666.2021.1990825. PMID: 34804412; PMCID: PMC8604520. <https://pubmed.ncbi.nlm.nih.gov/34804412/>
809. Endo B, Bahamon S, Martínez-Pulgarín DF. Central retinal vein occlusion after mRNA SARS-CoV-2 vaccination: A case report. *Indian J Ophthalmol.* 2021 Oct;69(10):2865-2866. doi: 10.4103/ijo.IJO_1477_21. PMID: 34571653; PMCID: PMC8597478. <https://pubmed.ncbi.nlm.nih.gov/34571653/>
810. Günther A, Brämer D, Pletz MW, et al. Complicated Long Term Vaccine Induced Thrombotic Immune Thrombocytopenia-A Case Report. *Vaccines (Basel)*. 2021 Nov 17;9(11):1344. doi: 10.3390/vaccines9111344. PMID: 34835275; PMCID: PMC8622649. <https://pubmed.ncbi.nlm.nih.gov/34835275/>
811. Hussain H, Sehring M, Soriano S. Deep Venous Thrombosis after Ad26.COVS.2 Vaccination in Adult Male. *Case Rep Crit Care.* 2021 Oct 14;2021:7682655. doi: 10.1155/2021/7682655. PMID: 34659839; PMCID: PMC8516572. <https://pubmed.ncbi.nlm.nih.gov/34659839/>
812. Kaulen LD, Doubrovinskaia S, Mooshage C, et al. Neurological autoimmune diseases following vaccinations against SARS-CoV-2: a case series. *Eur J Neurol.* 2022 Feb;29(2):555-563. doi: 10.1111/ene.15147. Epub 2021 Oct 31. PMID: 34668274; PMCID: PMC8652629. <https://pubmed.ncbi.nlm.nih.gov/34668274/>

813. Gadi SRV, Brunker PAR, Al-Samkari H, et al. Severe autoimmune hemolytic anemia following receipt of SARS-CoV-2 mRNA vaccine. *Transfusion*. 2021 Nov;61(11):3267-3271. doi: 10.1111/trf.16672. Epub 2021 Oct 3. PMID: 34549821; PMCID: PMC8661722. <https://pubmed.ncbi.nlm.nih.gov/34549821/>
814. Vaishya R, Sibal A, Singh SK, et al. Emergence of COVID-19 variants among ChAdOx1 nCoV-19 (recombinant) vaccine recipients. *Indian J Med Res*. 2021 May;153(5&6):559-561. doi: 10.4103/ijmr.ijmr_2061_21. PMID: 34528522; PMCID: PMC8555616. <https://pubmed.ncbi.nlm.nih.gov/34528522/>
815. Uaprasert N, Watanaboonyongcharoen P, Vichitrachaneekorn R, et al. Prevalence of thrombocytopenia, anti-platelet factor 4 antibodies and D-dimer elevation in Thai people After ChAdOx1 nCoV-19 vaccination. *Res Pract Thromb Haemost*. 2021 Sep 18;5(6):e12580. doi: 10.1002/rth2.12580. PMID: 34568726; PMCID: PMC8449289. <https://pubmed.ncbi.nlm.nih.gov/34568726/>
816. Uaprasert N, Watanaboonyongcharoen P, Vichitrachaneekorn R, et al. Prevalence of thrombocytopenia, anti-platelet factor 4 antibodies and D-dimer elevation in Thai people After ChAdOx1 nCoV-19 vaccination. *Res Pract Thromb Haemost*. 2021 Sep 18;5(6):e12580. doi: 10.1002/rth2.12580. PMID: 34568726; PMCID: PMC8449289. <https://pubmed.ncbi.nlm.nih.gov/34568726/>
817. Ceschia N, Scheggi V, Gori AM, et al. R. Diffuse prothrombotic syndrome after ChAdOx1 nCoV-19 vaccine administration: a case report. *J Med Case Rep*. 2021 Oct 6;15(1):496. doi: 10.1186/s13256-021-03083-y. PMID: 34615534; PMCID: PMC8493358. <https://pubmed.ncbi.nlm.nih.gov/34615534/>
818. Joob B, Wiwanitkit V. Change of blood viscosity after COVID-19 vaccination: estimation for persons with underlying metabolic syndrome. *Int J Physiol Pathophysiol Pharmacol*. 2021 Oct 15;13(5):148-151. PMID: 34868465; PMCID: PMC8611240. <https://pubmed.ncbi.nlm.nih.gov/34868465/>
819. Ramdeny S, Lang A, Al-Izzi S, et al. Management of a patient with a rare congenital limb malformation syndrome after SARS-CoV-2 vaccine-induced thrombosis and thrombocytopenia (VITT). *Br J Haematol*. 2021 Nov;195(3):299. doi: 10.1111/bjh.17619. Epub 2021 Jul 9. PMID: 34097311; PMCID: PMC8239676. <https://pubmed.ncbi.nlm.nih.gov/34097311/>
820. Giovane R, Campbell J. Bilateral Thalamic Stroke: A Case of COVID-19 Vaccine-Induced Immune Thrombotic Thrombocytopenia (VITT) or a Coincidence Due to Underlying Risk Factors? *Cureus*. 2021 Oct 22;13(10):e18977. doi: 10.7759/cureus.18977. PMID: 34820232; PMCID: PMC8606181. <https://pubmed.ncbi.nlm.nih.gov/34820232/>

821. Dhoot R, Kansal A, Handran C, et al. Thrombocytopenia and splanchnic thrombosis after Ad26.COV2.S vaccination successfully treated with transjugular intrahepatic portosystemic shunting and thrombectomy. *Am J Hematol*. 2021 Sep 1;96(9):1180-1182. doi: 10.1002/ajh.26258. Epub 2021 Jun 14. PMID: 34057234; PMCID: PMC8212098. <https://onlinelibrary.wiley.com/doi/10.1002/ajh.26258>
822. Hidayat R, Diafiri D, Zairinal RA, et al. Acute Ischaemic Stroke Incidence after Coronavirus Vaccine in Indonesia: Case Series. *Curr Neurovasc Res*. 2021;18(3):360-363. doi: 10.2174/1567202618666210927095613. PMID: 34579636. <https://pubmed.ncbi.nlm.nih.gov/34579636/>
823. Sumi T, Nagahisa Y, Matsuura K, et al. Lung squamous cell carcinoma with hemoptysis after vaccination with tozinameran (BNT162b2, Pfizer-BioNTech). *Thorac Cancer*. 2021 Nov;12(22):3072-3075. doi: 10.1111/1759-7714.14179. Epub 2021 Oct 6. PMID: 34612003; PMCID: PMC8590897. <https://pubmed.ncbi.nlm.nih.gov/34612003/>
824. Abiđić A, Adamec I, Habek M. Miller Fisher syndrome following Pfizer COVID-19 vaccine. *Neurol Sci*. 2021 Nov 24:1–3. doi: 10.1007/s10072-021-05776-0. Epub ahead of print. PMID: 34817727; PMCID: PMC8611397. <https://pubmed.ncbi.nlm.nih.gov/34817727/>
825. Nishiguchi Y, Matsuyama H, Maeda K, et al. Miller Fisher syndrome following BNT162b2 mRNA coronavirus 2019 vaccination. *BMC Neurol*. 2021 Nov 18;21(1):452. doi: 10.1186/s12883-021-02489-x. PMID: 34789193; PMCID: PMC8598937. <https://pubmed.ncbi.nlm.nih.gov/34789193/>
826. Soeiro T, Salvo F, Pariente A, et al. Type I interferons as the potential mechanism linking mRNA COVID-19 vaccines to Bell's palsy. *Therapie*. 2021 Jul-Aug;76(4):365-367. doi: 10.1016/j.therap.2021.03.005. Epub 2021 Apr 2. PMID: 33858693; PMCID: PMC8016545. <https://pubmed.ncbi.nlm.nih.gov/33858693/>
827. Erdem NŞ, Demirci S, Özel T, et al. Acute transverse myelitis after inactivated COVID-19 vaccine. *Idoggyogy Sz*. 2021 Jul 30;74(7-08):273-276. English. doi: 10.18071/isz.74.0273. PMID: 34370410. <https://pubmed.ncbi.nlm.nih.gov/34370410/>
828. Pagenkopf C, Südmeyer M. A case of longitudinally extensive transverse myelitis following vaccination against Covid-19. *J Neuroimmunol*. 2021 Sep 15;358:577606. doi: 10.1016/j.jneuroim.2021.577606. Epub 2021 Jun 24. PMID: 34182207; PMCID: PMC8223023. <https://pubmed.ncbi.nlm.nih.gov/34579245/>
829. A case of longitudinally extensive transverse myelitis following Covid-19 vaccination: <https://pubmed.ncbi.nlm.nih.gov/34182207/>

830. Ahmad SA, Salih KH, Ahmed SF, et al. Post COVID-19 transverse myelitis; a case report with review of literature. *Ann Med Surg (Lond)*. 2021 Sep;69:102749. doi: 10.1016/j.amsu.2021.102749. Epub 2021 Aug 23. PMID: 34457267; PMCID: PMC8380545. <https://pubmed.ncbi.nlm.nih.gov/34457267/>.
831. Chen S, Fan XR, He S, et al. Watch out for neuromyelitis optica spectrum disorder after inactivated virus vaccination for COVID-19. *Neurol Sci*. 2021 Sep;42(9):3537-3539. doi: 10.1007/s10072-021-05427-4. Epub 2021 Jun 29. PMID: 34189662; PMCID: PMC8241205. <https://pubmed.ncbi.nlm.nih.gov/34189662/>
832. Fujikawa P, Shah FA, Braford M, et al. Neuromyelitis Optica in a Healthy Female After Severe Acute Respiratory Syndrome Coronavirus 2 mRNA-1273 Vaccine. *Cureus*. 2021 Sep 14;13(9):e17961. doi: 10.7759/cureus.17961. PMID: 34660149; PMCID: PMC8516014. <https://pubmed.ncbi.nlm.nih.gov/34660149/>
833. Helmchen C, Buttler GM, Markewitz R, et al. Acute bilateral optic/chiasm neuritis with longitudinal extensive transverse myelitis in longstanding stable multiple sclerosis following vector-based vaccination against the SARS-CoV-2. *J Neurol*. 2022 Jan;269(1):49-54. doi: 10.1007/s00415-021-10647-x. Epub 2021 Jun 15. PMID: 34131771; PMCID: PMC8205198. <https://pubmed.ncbi.nlm.nih.gov/34131771/>
834. Jeon YH, Lim DH, Choi SW, et al. A flare of Still's disease following COVID-19 vaccination in a 34-year-old patient. *Rheumatol Int*. 2021 Nov 19:1–6. doi: 10.1007/s00296-021-05052-6. Epub ahead of print. PMID: 34797392; PMCID: PMC8602986. <https://pubmed.ncbi.nlm.nih.gov/34797392/>
835. Cory P, Lawrence H, Abdulrahim H, et al. Lessons of the month 3: Haemophagocytic lymphohistiocytosis following COVID-19 vaccination (ChAdOx1 nCoV-19). *Clin Med (Lond)*. 2021 Nov;21(6):e677-e679. doi: 10.7861/clinmed.2021-0564. PMID: 34862234; PMCID: PMC8806304. <https://pubmed.ncbi.nlm.nih.gov/34862234/>
836. King WW, Petersen MR, Matar RM, et al. Myocarditis following mRNA vaccination against SARS-CoV-2, a case series. *Am Heart J Plus*. 2021 Aug;8:100042. doi: 10.1016/j.ahjo.2021.100042. Epub 2021 Aug 9. PMID: 34396358; PMCID: PMC8349733. <https://pubmed.ncbi.nlm.nih.gov/34396358/>.
837. Dang YL, Bryson A. Miller-Fisher Syndrome and Guillain-Barre Syndrome overlap syndrome in a patient post Oxford-AstraZeneca SARS-CoV-2 vaccination. *BMJ Case Rep*. 2021 Nov 30;14(11):e246701. doi: 10.1136/bcr-2021-246701. PMID: 34848426; PMCID: PMC8634230. <https://pubmed.ncbi.nlm.nih.gov/34848426/>.
838. Watad A, De Marco G, Mahajna H, et al. Immune-Mediated Disease Flares or New-Onset Disease in 27 Subjects Following mRNA/DNA SARS-CoV-2 Vaccination. *Vaccines (Basel)*.

- 2021 Apr 29;9(5):435. doi: 10.3390/vaccines9050435. PMID: 33946748; PMCID: PMC8146571. <https://pubmed.ncbi.nlm.nih.gov/33946748/>
839. Schneider J, Sottmann L, Greinacher A, et al. Postmortem investigation of fatalities following vaccination with COVID-19 vaccines. *Int J Legal Med*. 2021 Nov;135(6):2335-2345. doi: 10.1007/s00414-021-02706-9. Epub 2021 Sep 30. PMID: 34591186; PMCID: PMC8482743. <https://pubmed.ncbi.nlm.nih.gov/34591186/>
 840. Plasse R, Nee R, Gao S, et al. Acute kidney injury with gross hematuria and IgA nephropathy after COVID-19 vaccination. *Kidney Int*. 2021 Oct;100(4):944-945. doi: 10.1016/j.kint.2021.07.020. Epub 2021 Aug 3. PMID: 34352309; PMCID: PMC8329426. <https://pubmed.ncbi.nlm.nih.gov/34352309/>
 841. Qasim H, Ali E, Yassin MA. Immune thrombocytopenia relapse post covid-19 vaccine in young male patient. *IDCases*. 2021;26:e01344. doi: 10.1016/j.idcr.2021.e01344. Epub 2021 Nov 17. PMID: 34804803; PMCID: PMC8595970. <https://pubmed.ncbi.nlm.nih.gov/34804803/>.
 842. Krajewski PK, Szepietowski JC. Immune thrombocytopenic purpura associated with COVID-19 Pfizer-BioNTech BNT16B2b2 mRNA vaccine. *J Eur Acad Dermatol Venereol*. 2021 Oct;35(10):e626-e627. doi: 10.1111/jdv.17444. Epub 2021 Jun 16. PMID: 34077572; PMCID: PMC8242419. <https://pubmed.ncbi.nlm.nih.gov/34077572/>
 843. Park HS, Byun Y, Byeon SH, et al. Retinal Hemorrhage after SARS-CoV-2 Vaccination. *J Clin Med*. 2021 Dec 5;10(23):5705. doi: 10.3390/jcm10235705. PMID: 34884407; PMCID: PMC8658415. <https://pubmed.ncbi.nlm.nih.gov/34884407/>.
 844. Chen CC, Chen HY, Lu CC, et al. Case Report: Anti-neutrophil Cytoplasmic Antibody-Associated Vasculitis With Acute Renal Failure and Pulmonary Hemorrhage May Occur After COVID-19 Vaccination. *Front Med (Lausanne)*. 2021 Nov 11;8:765447. doi: 10.3389/fmed.2021.765447. PMID: 34859017; PMCID: PMC8632021. <https://pubmed.ncbi.nlm.nih.gov/34859017/>
 845. Takeyama R, Fukuda K, Kouzaki Y, et al. Intracerebral hemorrhage due to vasculitis following COVID-19 vaccination: a case report. *Acta Neurochir (Wien)*. 2021 Nov 16:1–5. doi: 10.1007/s00701-021-05038-0. Epub ahead of print. PMID: 34783899; PMCID: PMC8594320. <https://pubmed.ncbi.nlm.nih.gov/34783899/>
 846. Finsterer J, Redzic Z. Symptomatic peduncular, cavernous bleeding following SARS-CoV-2 vaccination induced immune thrombocytopenia. *Brain Hemorrhages*. 2021 Dec;2(4):169-171. doi: 10.1016/j.heest.2021.09.001. Epub 2021 Sep 16. PMID: 34549178; PMCID: PMC8443534. <https://pubmed.ncbi.nlm.nih.gov/34549178/>.

847. Watchmaker JM, Belani PB. Brain death in a vaccinated patient with COVID-19 infection. *Clin Imaging*. 2022 Jan;81:92-95. doi: 10.1016/j.clinimag.2021.09.020. Epub 2021 Oct 11. PMID: 34656887; PMCID: PMC8502685. <https://pubmed.ncbi.nlm.nih.gov/34656887/>
848. Falkenhain-López D, Gutiérrez-Collar C, Arroyo-Andrés J, et al. Widespread purpura annularis telangiectodes following mRNA SARS-CoV-2 vaccine. *J Eur Acad Dermatol Venereol*. 2021 Nov;35(11):e719-e721. doi: 10.1111/jdv.17497. Epub 2021 Jul 21. PMID: 34236717; PMCID: PMC8447368. <https://pubmed.ncbi.nlm.nih.gov/34236717/>.
849. Finsterer J. Lobar bleeding with ventricular rupture shortly after first dosage of an mRNA-based SARS-CoV-2 vaccine. *Brain Hemorrhages*. 2021 Oct 28. doi: 10.1016/j.hest.2021.10.001. Epub ahead of print. PMID: 34729467; PMCID: PMC8553377. <https://pubmed.ncbi.nlm.nih.gov/34729467/>.
850. Rahim SEG, Lin JT, Wang JC. A case of gross hematuria and IgA nephropathy flare-up following SARS-CoV-2 vaccination. *Kidney Int*. 2021 Jul;100(1):238. doi: 10.1016/j.kint.2021.04.024. Epub 2021 Apr 28. PMID: 33932458; PMCID: PMC8079938. <https://pubmed.ncbi.nlm.nih.gov/33932458/>
851. Melgosa Ramos FJ, Estébanez Corrales A, Mateu Puchades A. Acral haemorrhage after the second dose administration of SARS-CoV-2 vaccine. A post-vaccinal reaction? *Med Clin (Barc)*. 2021 Nov 26;157(10):506. English, Spanish. doi: 10.1016/j.medcli.2021.04.021. Epub 2021 May 11. PMID: 34092400; PMCID: PMC8112292. <https://pubmed.ncbi.nlm.nih.gov/34092400/742>.
852. Cooper KM, Switzer B. Severe immune thrombocytopenic purpura after SARS-CoV-2 vaccine. *Arch Clin Cases*. 2021 Oct 27;8(2):31-36. doi: 10.22551/2021.31.0802.10182. PMID: 34754937; PMCID: PMC8565691. <https://pubmed.ncbi.nlm.nih.gov/34754937/>
853. Negrea L, Rovin BH. Gross hematuria following vaccination for severe acute respiratory syndrome coronavirus 2 in 2 patients with IgA nephropathy. *Kidney Int*. 2021 Jun;99(6):1487. doi: 10.1016/j.kint.2021.03.002. Epub 2021 Mar 24. PMID: 33771584; PMCID: PMC7987498. <https://pubmed.ncbi.nlm.nih.gov/33771584/>
854. Pomara C, Sessa F, Ciaccio M, et al. COVID-19 Vaccine and Death: Causality Algorithm According to the WHO Eligibility Diagnosis. *Diagnostics (Basel)*. 2021 May 26;11(6):955. doi: 10.3390/diagnostics11060955. PMID: 34073536; PMCID: PMC8229116. <https://pubmed.ncbi.nlm.nih.gov/34073536/>
855. Wan EYF, Chui CSL, Lai FTT, et al. Bell's palsy following vaccination with mRNA (BNT162b2) and inactivated (CoronaVac) SARS-CoV-2 vaccines: a case series and nested case-control study. *Lancet Infect Dis*. 2022 Jan;22(1):64-72. doi: 10.1016/S1473-3099(21)00451-5. Epub 2021 Aug 16. PMID: 34411532; PMCID: PMC8367195. <https://pubmed.ncbi.nlm.nih.gov/34411532/>

856. Buchan S, Seo C, Johnson C. Epidemiology of myocarditis and pericarditis following mRNA vaccines in Ontario, Canada: by vaccine product, schedule, and interval. *MedRxiv*. 2021 Dec 01. <https://www.medrxiv.org/content/10.1101/2021.12.02.21267156v1>
857. Park HJ, Montgomery JR, Boggs NA. Anaphylaxis After the Covid-19 Vaccine in a Patient With Cholinergic Urticaria. *Mil Med*. 2021 Apr 14;usab138. doi: 10.1093/milmed/usab138. Epub ahead of print. PMID: 33851711; PMCID: PMC8083203. <https://pubmed.ncbi.nlm.nih.gov/33851711/>
858. Laisuan W, Wongsu C, Chiewchalerm Sri C, et al. CoronaVac COVID-19 Vaccine-Induced Anaphylaxis: Clinical Characteristics and Revaccination Outcomes. *J Asthma Allergy*. 2021 Oct 7;14:1209-1215. doi: 10.2147/JAA.S333098. PMID: 34675550; PMCID: PMC8504472. <https://pubmed.ncbi.nlm.nih.gov/34675550/>.
859. Mayfield J, Bandi S, Ganti L, et al. Anaphylaxis after Moderna COVID-19 vaccine. *Ther Adv Vaccines Immunother*. 2021 Oct 28;9:25151355211048418. doi: 10.1177/25151355211048418. PMID: 34734159; PMCID: PMC8558796. <https://pubmed.ncbi.nlm.nih.gov/34734159/>.
860. Li L, Robinson LB, Patel R, et al. Association of Self-reported High-Risk Allergy History With Allergy Symptoms After COVID-19 Vaccination. *JAMA Netw Open*. 2021 Oct 1;4(10):e2131034. doi: 10.1001/jamanetworkopen.2021.31034. PMID: 34698847; PMCID: PMC8548941. <https://pubmed.ncbi.nlm.nih.gov/34698847/>
861. Somiya M, Mine S, Yasukawa K, et al. Sex differences in the incidence of anaphylaxis to LNP-mRNA COVID-19 vaccines. *Vaccine*. 2021 Jun 8;39(25):3313-3314. doi: 10.1016/j.vaccine.2021.04.066. Epub 2021 May 6. PMID: 34020815; PMCID: PMC8101867. <https://pubmed.ncbi.nlm.nih.gov/34020815/>
862. Shimabukuro T. Allergic reactions including anaphylaxis after receipt of the first dose of Pfizer-BioNTech COVID-19 vaccine - United States, December 14-23, 2020. *Am J Transplant*. 2021 Mar;21(3):1332-1337. doi: 10.1111/ajt.16516. PMID: 33641264; PMCID: PMC8013489. <https://pubmed.ncbi.nlm.nih.gov/33641264/>
863. Shimabukuro T. Allergic reactions including anaphylaxis after receipt of the first dose of Moderna COVID-19 vaccine - United States, December 21, 2020-January 10, 2021. *Am J Transplant*. 2021 Mar;21(3):1326-1331. doi: 10.1111/ajt.16517. PMID: 33641268; PMCID: PMC8013433. <https://pubmed.ncbi.nlm.nih.gov/33641268/>
864. Frank A, Radparvar S, Manasia A, et al. Prolonged Anaphylaxis to Pfizer Coronavirus Disease 2019 Vaccine: A Case Report and Mechanism of Action. *Crit Care Explor*. 2021 Apr 2;3(4):e0397. doi: 10.1097/CCE.0000000000000397. PMID: 33834172; PMCID: PMC8021358. <https://pubmed.ncbi.nlm.nih.gov/33834172/>

865. Lim XR, Leung BP, Ng CYL, et al. Pseudo-Anaphylactic Reactions to Pfizer BNT162b2 Vaccine: Report of 3 Cases of Anaphylaxis Post Pfizer BNT162b2 Vaccination. *Vaccines (Basel)*. 2021 Aug 31;9(9):974. doi: 10.3390/vaccines9090974. PMID: 34579211; PMCID: PMC8471482.: <https://pubmed.ncbi.nlm.nih.gov/34579211/>
866. Pitlick MM, Park MA, Gonzalez-Estrada A, et al. Biphasic anaphylaxis after first dose of messenger RNA coronavirus disease 2019 vaccine with positive polysorbate 80 skin testing result. *Ann Allergy Asthma Immunol*. 2021 Oct;127(4):498-499. doi: 10.1016/j.anai.2021.07.020. Epub 2021 Jul 31. PMID: 34343674; PMCID: PMC8325373.: <https://pubmed.ncbi.nlm.nih.gov/34343674/>
867. Aye YN, Mai AS, Zhang A, et al. Acute Myocardial Infarction and Myocarditis following COVID-19 Vaccination. *QJM*. 2021 Sep 29;hcab252. doi: 10.1093/qjmed/hcab252. Epub ahead of print. PMID: 34586408; PMCID: PMC8522388. <https://pubmed.ncbi.nlm.nih.gov/34586408/>
868. Fearon C, Parwani P, Gow-Lee B, et al. Takotsubo syndrome after receiving the COVID-19 vaccine. *J Cardiol Cases*. 2021 Nov;24(5):223-226. doi: 10.1016/j.jccase.2021.08.012. Epub 2021 Sep 15. PMID: 34539938; PMCID: PMC8440167. <https://pubmed.ncbi.nlm.nih.gov/34539938/>.
869. Toida R, Uezono S, Komatsu H, et al. Takotsubo cardiomyopathy after vaccination for coronavirus disease 2019 in a patient on maintenance hemodialysis. *CEN Case Rep*. 2021 Nov 3:1–5. doi: 10.1007/s13730-021-00657-z. Epub ahead of print. PMID: 34731486; PMCID: PMC8564792. <https://pubmed.ncbi.nlm.nih.gov/34731486/>.
870. Boivin Z, Martin J. Untimely Myocardial Infarction or COVID-19 Vaccine Side Effect. *Cureus*. 2021 Mar 2;13(3):e13651. doi: 10.7759/cureus.13651. PMID: 33824804; PMCID: PMC8012173. <https://pubmed.ncbi.nlm.nih.gov/33824804/>
871. Jabagi MJ, Botton J, Bertrand M, et al. Myocardial Infarction, Stroke, and Pulmonary Embolism After BNT162b2 mRNA COVID-19 Vaccine in People Aged 75 Years or Older. *JAMA*. 2022 Jan 4;327(1):80-82. doi: 10.1001/jama.2021.21699. PMID: 34807248; PMCID: PMC8609457. <https://pubmed.ncbi.nlm.nih.gov/34807248/>
872. Özdemir İH, Özlek B, Özen MB, et al. Type 1 Kounis Syndrome Induced by Inactivated SARS-COV-2 Vaccine. *J Emerg Med*. 2021 Oct;61(4):e71-e76. doi: 10.1016/j.jemermed.2021.04.018. Epub 2021 May 7. PMID: 34148772; PMCID: PMC8103145. <https://pubmed.ncbi.nlm.nih.gov/34148772/>
873. Kounis NG, Koniari I, Mplani V, et al. Acute Myocardial Infarction Within 24 Hours After COVID-19 Vaccination: Is Kounis Syndrome the Culprit? *Am J Cardiol*. 2022 Jan 1;162:207. doi: 10.1016/j.amjcard.2021.09.032. Epub 2021 Oct 24. PMID: 34702550; PMCID: PMC8541841. <https://pubmed.ncbi.nlm.nih.gov/34702550/>

874. Edler C, Klein A, Schröder AS, et al. Deaths associated with newly launched SARS-CoV-2 vaccination (Comirnaty®). *Leg Med (Tokyo)*. 2021 Jul;51:101895. doi: 10.1016/j.legalmed.2021.101895. Epub 2021 Apr 17. PMID: 33895650; PMCID: PMC8052499. <https://pubmed.ncbi.nlm.nih.gov/33895650/>
875. Mungmunpuntipantip R, Wiwanitkit V. Deaths associated with newly launched SARS-CoV-2 vaccination. *Leg Med (Tokyo)*. 2021 Nov;53:101956. doi: 10.1016/j.legalmed.2021.101956. Epub 2021 Aug 18. PMID: 34425384; PMCID: PMC8372443. <https://pubmed.ncbi.nlm.nih.gov/34425384/>
876. Barsha SY, Akiful Haque MM, Rashid MU, et al. A case of acute encephalopathy and non-ST segment elevation myocardial infarction following mRNA-1273 vaccination: possible adverse effect? *Clin Exp Vaccine Res*. 2021 Sep;10(3):293-297. doi: 10.7774/cevr.2021.10.3.293. Epub 2021 Sep 30. PMID: 34703815; PMCID: PMC8511584. <https://pubmed.ncbi.nlm.nih.gov/34703815/>
877. Gillion V, Jadoul M, Demoulin N, et al. Granulomatous vasculitis after the AstraZeneca anti-SARS-CoV-2 vaccine. *Kidney Int*. 2021 Sep;100(3):706-707. doi: 10.1016/j.kint.2021.06.033. Epub 2021 Jul 5. PMID: 34237323; PMCID: PMC8256676. <https://pubmed.ncbi.nlm.nih.gov/34237323/>
878. Zheng F, Willis A, Kunjukunju N. Acute Retinal Necrosis from Reactivation of Varicella Zoster Virus following BNT162b2 mRNA COVID-19 Vaccination. *Ocul Immunol Inflamm*. 2021 Dec 1:1-3. doi: 10.1080/09273948.2021.2001540. Epub ahead of print. PMID: 34851795. <https://pubmed.ncbi.nlm.nih.gov/34851795/>
879. Kinariwalla N, London AO, Soliman YS, et al. A case of generalized Sweet syndrome with vasculitis triggered by recent COVID-19 vaccination. *JAAD Case Rep*. 2022 Jan;19:64-67. doi: 10.1016/j.jdc.2021.11.010. Epub 2021 Nov 25. PMID: 34849386; PMCID: PMC8612751. <https://pubmed.ncbi.nlm.nih.gov/34849386/>
880. Guzmán-Pérez L, Puerta-Peña M, Falkenhain-López D, et al. Small-vessel vasculitis following Oxford-AstraZeneca vaccination against SARS-CoV-2. *J Eur Acad Dermatol Venereol*. 2021 Nov;35(11):e741-e743. doi: 10.1111/jdv.17547. Epub 2021 Aug 4. PMID: 34310763; PMCID: PMC8447203. <https://pubmed.ncbi.nlm.nih.gov/34310763/>
881. Conticini E, d'Alessandro M, Bergantini L, et al. Relapse of microscopic polyangiitis after vaccination against COVID-19: A case report. *J Med Virol*. 2021 Dec;93(12):6439-6441. doi: 10.1002/jmv.27192. Epub 2021 Jul 20. PMID: 34251683; PMCID: PMC8426895. <https://pubmed.ncbi.nlm.nih.gov/34251683/>

882. Colia R, Rotondo C, Corrado A, et al. Cutaneous vasculitis after severe acute respiratory syndrome coronavirus 2 vaccine. *Rheumatol Adv Pract*. 2021 Sep 16;5(3):rkab050. doi: 10.1093/rap/rkab050. PMID: 34557622; PMCID: PMC8452996. <https://pubmed.ncbi.nlm.nih.gov/34557622/>.
883. Mohta A, Arora A, Srinivasa R, et al. Recurrent herpes zoster after COVID-19 vaccination in patients with chronic urticaria being treated with cyclosporine-A report of 3 cases. *J Cosmet Dermatol*. 2021 Nov;20(11):3384-3386. doi: 10.1111/jocd.14437. Epub 2021 Sep 12. PMID: 34510694; PMCID: PMC8661977. <https://pubmed.ncbi.nlm.nih.gov/34510694/>
884. Jin WJ, Ahn SW, Jang SH, et al. Leukocytoclastic vasculitis after coronavirus disease 2019 vaccination. *J Dermatol*. 2022 Jan;49(1):e34-e35. doi: 10.1111/1346-8138.16212. Epub 2021 Oct 28. PMID: 34713472; PMCID: PMC8652425. <https://pubmed.ncbi.nlm.nih.gov/34713472/803>
885. Visentini M, Gragnani L, Santini SA, et al. Flares of mixed cryoglobulinaemia vasculitis after vaccination against SARS-CoV-2. *Ann Rheum Dis*. 2021 Nov 24;annrheumdis-2021-221248. doi: 10.1136/annrheumdis-2021-221248. Epub ahead of print. PMID: 34819272. <https://pubmed.ncbi.nlm.nih.gov/34819272/>
886. Berry CT, Eliliwi M, Gallagher S, et al. Cutaneous small vessel vasculitis following single-dose Janssen Ad26.COV2.S vaccination. *JAAD Case Rep*. 2021 Sep;15:11-14. doi: 10.1016/j.jidcr.2021.07.002. Epub 2021 Jul 14. PMID: 34337124; PMCID: PMC8302840. <https://pubmed.ncbi.nlm.nih.gov/34337124/>
887. Iwata H, Kamiya K, Kado S, et al. Case of immunoglobulin A vasculitis following coronavirus disease 2019 vaccination. *J Dermatol*. 2021 Dec;48(12):e598-e599. doi: 10.1111/1346-8138.16167. Epub 2021 Sep 17. PMID: 34535924; PMCID: PMC8652428. <https://pubmed.ncbi.nlm.nih.gov/34535924/>
888. Goldman S, Bron D, Tousseyn T. Rapid progression of angioimmunoblastic T-cell lymphoma after BNT162b2 mRNA booster vaccination. *Frontiers of Medicine*. 2021 Nov 25 <https://www.frontiersin.org/articles/10.3389/fmed.2021.798095/>
889. Abi Zeid Daou C, Natout MA, et al. Biphasic anaphylaxis after exposure to the first dose of Pfizer-BioNTech COVID-19 mRNA vaccine. *J Med Virol*. 2021 Oct;93(10):6027-6029. doi: 10.1002/jmv.27109. Epub 2021 Jun 6. PMID: 34050949; PMCID: PMC8242856. <https://pubmed.ncbi.nlm.nih.gov/34050949/>
890. Mortazavi S. COVID-19 Vaccination-Associated Axillary Adenopathy: Imaging Findings and Follow-Up Recommendations in 23 Women. *AJR Am J Roentgenol*. 2021 Oct;217(4):857-858. doi: 10.2214/AJR.21.25651. Epub 2021 Feb 24. PMID: 33624520. <https://pubmed.ncbi.nlm.nih.gov/33624520/>

891. Cardoso F, Reis A, Osório C, et al. A Case of Cervical Lymphadenopathy After Vaccination Against COVID-19. *Cureus*. 2021 May 16;13(5):e15050. doi: 10.7759/cureus.15050. PMID: 34141500; PMCID: PMC8204135. <https://pubmed.ncbi.nlm.nih.gov/34141500/>
892. Keir G, Maria NI, Kirsch CFE. Unique Imaging Findings of Neurologic Phantosmia Following Pfizer-BioNtech COVID-19 Vaccination: A Case Report. *Top Magn Reson Imaging*. 2021 Jun 1;30(3):133-137. doi: 10.1097/RMR.0000000000000287. PMID: 34096896. <https://pubmed.ncbi.nlm.nih.gov/34096896/>
893. Tobaiqy M, MacLure K, Elkout H, et al. Thrombotic Adverse Events Reported for Moderna, Pfizer and Oxford-AstraZeneca COVID-19 Vaccines: Comparison of Occurrence and Clinical Outcomes in the EudraVigilance Database. *Vaccines (Basel)*. 2021 Nov 15;9(11):1326. doi: 10.3390/vaccines9111326. PMID: 34835256; PMCID: PMC8624459. <https://pubmed.ncbi.nlm.nih.gov/34835256/>
894. Vuille-Lessard É, Montani M, Bosch J, et al. Autoimmune hepatitis triggered by SARS-CoV-2 vaccination. *J Autoimmun*. 2021 Sep;123:102710. doi: 10.1016/j.jaut.2021.102710. Epub 2021 Jul 28. PMID: 34332438; PMCID: PMC8316013. <https://pubmed.ncbi.nlm.nih.gov/34332438/>.
895. Lim JH, Han MH, Kim YJ, et al. New-onset Nephrotic Syndrome after Janssen COVID-19 Vaccination: a Case Report and Literature Review. *J Korean Med Sci*. 2021 Aug 2;36(30):e218. doi: 10.3346/jkms.2021.36.e218. PMID: 34342187; PMCID: PMC8329389. <https://pubmed.ncbi.nlm.nih.gov/34342187/>.
896. Sekar A, Campbell R, Tabbara J, et al. ANCA glomerulonephritis after the Moderna COVID-19 vaccination. *Kidney Int*. 2021 Aug;100(2):473-474. doi: 10.1016/j.kint.2021.05.017. Epub 2021 May 31. PMID: 34081948; PMCID: PMC8166044. <https://pubmed.ncbi.nlm.nih.gov/34081948/>
897. Notghi AA, Atley J, Silva M. Lessons of the month 1: Longitudinal extensive transverse myelitis following AstraZeneca COVID-19 vaccination. *Clin Med (Lond)*. 2021 Sep;21(5):e535-e538. doi: 10.7861/clinmed.2021-0470. PMID: 34507942; PMCID: PMC8439525. <https://pubmed.ncbi.nlm.nih.gov/34507942/>.
898. Robichaud J, Côté C, Côté F. Systemic capillary leak syndrome after ChAdOx1 nCoV-19 (Oxford-AstraZeneca) vaccination. *CMAJ*. 2021 Aug 30;193(34):E1341-E1344. doi: 10.1503/cmaj.211212. Epub 2021 Aug 6. PMID: 34362727; PMCID: PMC8432311. <https://pubmed.ncbi.nlm.nih.gov/34362727/>
899. D'Agati VD, Kudose S, Bomback AS, et al. Minimal change disease and acute kidney injury following the Pfizer-BioNTech COVID-19 vaccine. *Kidney Int*. 2021 Aug;100(2):461-463. doi: 10.1016/j.kint.2021.04.035. Epub 2021 May 15. PMID: 34000278; PMCID: PMC8123374. <https://pubmed.ncbi.nlm.nih.gov/34000278/>

900. Scott J, Anderson J, Mallak N, et al. Gastroparesis After Pfizer-BioNTech COVID-19 Vaccination. *Am J Gastroenterol*. 2021 Nov 1;116(11):2300. doi: 10.14309/ajg.0000000000001354. PMID:34187985. <https://pubmed.ncbi.nlm.nih.gov/34187985/>.
901. Nawwar AA, Searle J, Singh R, et al. Oxford-AstraZeneca COVID-19 vaccination induced lymphadenopathy on [18F]Choline PET/CT-not only an FDG finding. *Eur J Nucl Med Mol Imaging*. 2021 Jul;48(8):2657-2658. doi: 10.1007/s00259-021-05279-2. Epub 2021 Mar 4. PMID: 33661328; PMCID: PMC7930521. <https://pubmed.ncbi.nlm.nih.gov/33661328/>
902. Abi Zeid Daou C, Natout MA, El Hadi N. Biphasic anaphylaxis after exposure to the first dose of Pfizer-BioNTech COVID-19 mRNA vaccine. *J Med Virol*. 2021 Oct;93(10):6027-6029. doi: 10.1002/jmv.27109. Epub 2021 Jun 6. PMID: 34050949; PMCID: PMC8242856. <https://pubmed.ncbi.nlm.nih.gov/34050949/>
903. Mortazavi S. COVID-19 Vaccination-Associated Axillary Adenopathy: Imaging Findings and Follow-Up Recommendations in 23 Women. *AJR Am J Roentgenol*. 2021 Oct;217(4):857-858. doi: 10.2214/AJR.21.25651. Epub 2021 Feb 24. PMID: 33624520. <https://pubmed.ncbi.nlm.nih.gov/33624520/>
904. Cardoso F, Reis A, Osório C, et al. A Case of Cervical Lymphadenopathy After Vaccination Against COVID-19. *Cureus*. 2021 May 16;13(5):e15050. doi: 10.7759/cureus.15050. PMID: 34141500; PMCID: PMC8204135. <https://pubmed.ncbi.nlm.nih.gov/34141500/>
905. Keir G, Maria NI, Kirsch CFE. Unique Imaging Findings of Neurologic Phantosmia Following Pfizer-BioNTech COVID-19 Vaccination: A Case Report. *Top Magn Reson Imaging*. 2021 Jun 1;30(3):133-137. doi: 10.1097/RMR.0000000000000287. PMID: 34096896. <https://pubmed.ncbi.nlm.nih.gov/34096896/>
906. Tobaiqy M, MacLure K, Elkout H, et al. Thrombotic Adverse Events Reported for Moderna, Pfizer and Oxford-AstraZeneca COVID-19 Vaccines: Comparison of Occurrence and Clinical Outcomes in the EudraVigilance Database. *Vaccines (Basel)*. 2021 Nov 15;9(11):1326. doi: 10.3390/vaccines9111326. PMID: 34835256; PMCID: PMC8624459. <https://pubmed.ncbi.nlm.nih.gov/34835256/>
907. Lehman CD, D'Alessandro HA, Mendoza DP, et al. Unilateral Lymphadenopathy After COVID-19 Vaccination: A Practical Management Plan for Radiologists Across Specialties. *J Am Coll Radiol*. 2021 Jun;18(6):843-852. doi: 10.1016/j.jacr.2021.03.001. Epub 2021 Mar 4. PMID: 33713605; PMCID: PMC7931722. <https://pubmed.ncbi.nlm.nih.gov/33713605/>
908. Mehta N, Sales RM, Babagbemi K, et al. Unilateral axillary adenopathy in the setting of COVID-19 vaccine: Follow-up. *Clin Imaging*. 2021 Dec;80:83-87. doi: 10.1016/j.clinimag.2021.06.037. Epub 2021 Jul 9. PMID: 34298342; PMCID: PMC8268700. <https://pubmed.ncbi.nlm.nih.gov/34298342/>

909. Ismail II, Salama S. A systematic review of cases of CNS demyelination following COVID-19 vaccination. *J Neuroimmunol.* 2022 Jan 15;362:577765. doi: 10.1016/j.jneuroim.2021.577765. Epub 2021 Nov 9. PMID: 34839149; PMCID: PMC8577051. <https://pubmed.ncbi.nlm.nih.gov/34839149/>
910. Lim JH, Han MH, Kim YJ, et al. New-onset Nephrotic Syndrome after Janssen COVID-19 Vaccination: a Case Report and Literature Review. *J Korean Med Sci.* 2021 Aug 2;36(30):e218. doi: 10.3346/jkms.2021.36.e218. PMID: 34342187; PMCID: PMC8329389. <https://pubmed.ncbi.nlm.nih.gov/34342187/>.
911. Ganga K, Solyar AY, Ganga R. Massive Cervical Lymphadenopathy Post-COVID-19 Vaccination. *Ear Nose Throat J.* 2021 Oct 2;1455613211048984. doi: 10.1177/01455613211048984. Epub ahead of print. PMID: 34601889. <https://pubmed.ncbi.nlm.nih.gov/34601889/>
912. Sekar A, Campbell R, Tabbara J, Rastogi P. ANCA glomerulonephritis after the Moderna COVID-19 vaccination. *Kidney Int.* 2021 Aug;100(2):473-474. doi: 10.1016/j.kint.2021.05.017. Epub 2021 May 31. PMID: 34081948; PMCID: PMC8166044. <https://pubmed.ncbi.nlm.nih.gov/34081948/>
913. Notghi AA, Atley J, Silva M. Lessons of the month 1: Longitudinal extensive transverse myelitis following AstraZeneca COVID-19 vaccination. *Clin Med (Lond).* 2021 Sep;21(5):e535-e538. doi: 10.7861/clinmed.2021-0470. PMID: 34507942; PMCID: PMC8439525. <https://pubmed.ncbi.nlm.nih.gov/34507942/>.
914. Robichaud J, Côté C, Côté F. Systemic capillary leak syndrome after ChAdOx1 nCoV-19 (Oxford-AstraZeneca) vaccination. *CMAJ.* 2021 Aug 30;193(34):E1341-E1344. doi: 10.1503/cmaj.211212. Epub 2021 Aug 6. PMID: 34362727; PMCID: PMC8432311. <https://pubmed.ncbi.nlm.nih.gov/34362727/>
915. Plaza MJ, Wright J, Fernandez S. COVID-19 vaccine-related unilateral axillary lymphadenopathy: Pattern on screening breast MRI allowing for a benign assessment. *Clin Imaging.* 2021 Dec;80:139-141. doi: 10.1016/j.clinimag.2021.07.011. Epub 2021 Jul 24. PMID: 34325221; PMCID: PMC8302478. <https://pubmed.ncbi.nlm.nih.gov/34325221/>
916. Ashoor A, Shephard J, Lissidini G, et al. Axillary Adenopathy in Patients with Recent Covid-19 Vaccination: A New Diagnostic Dilemma. *Korean J Radiol.* 2021 Dec;22(12):2124-2126. doi: 10.3348/kjr.2021.0635. PMID: 34825530; PMCID: PMC8628154. <https://pubmed.ncbi.nlm.nih.gov/34825530/>.
917. D'Agati VD, Kudose S, Bomback AS, et al. Minimal change disease and acute kidney injury following the Pfizer-BioNTech COVID-19 vaccine. *Kidney Int.* 2021 Aug;100(2):461-463. doi: 10.1016/j.kint.2021.04.035. Epub 2021 May 15. PMID: 34000278; PMCID: PMC8123374. <https://pubmed.ncbi.nlm.nih.gov/34000278/>

918. Igual-Rouilleault AC, Soriano I, Quan PL, et al. Unilateral axillary adenopathy induced by COVID-19 vaccine: US follow-up evaluation. *Eur Radiol.* 2021 Oct 16;1–8. doi: 10.1007/s00330-021-08309-7. Epub ahead of print. PMID: 34655312; PMCID: PMC8520081. <https://pubmed.ncbi.nlm.nih.gov/34655312/>.
919. Scott J, Anderson J, Mallak N, et al. Gastroparesis After Pfizer-BioNTech COVID-19 Vaccination. *Am J Gastroenterol.* 2021 Nov 1;116(11):2300. doi: 10.14309/ajg.0000000000001354. PMID: 34187985. <https://pubmed.ncbi.nlm.nih.gov/34187985/>.
920. Buchhorn R, Meyer C, Schulze-Forster K, et al. Autoantibody Release in Children after Corona Virus mRNA Vaccination: A Risk Factor of Multisystem Inflammatory Syndrome? *Vaccines (Basel).* 2021 Nov 18;9(11):1353. doi: 10.3390/vaccines9111353. PMID: 34835284; PMCID: PMC8618727. <https://www.ncbi.nlm.nih.gov/pubmed/34835284>
921. Calcaterra G, Bassareo PP, Barilla' F, et al. Concerning the unexpected prothrombotic state following some coronavirus disease 2019 vaccines. *J Cardiovasc Med (Hagerstown).* 2022 Feb 1;23(2):71-74. doi: 10.2459/JCM.0000000000001232. PMID: 34366403.. <https://www.ncbi.nlm.nih.gov/pubmed/34366403>
922. Calcaterra G, Mehta JL, de Gregorio C, et al. COVID 19 Vaccine for Adolescents. Concern about Myocarditis and Pericarditis. *Pediatr Rep.* 2021 Sep 1;13(3):530-533. doi: 10.3390/pediatric13030061. PMID: 34564344; PMCID: PMC8482102. <https://www.ncbi.nlm.nih.gov/pubmed/34564344>
923. Chai Q, Nygaard U, Schmidt RC, et al. Multisystem inflammatory syndrome in a male adolescent after his second Pfizer-BioNTech COVID-19 vaccine. *Acta Paediatr.* 2022 Jan;111(1):125-127. doi: 10.1111/apa.16141. Epub 2021 Oct 28. PMID: 34617315; PMCID: PMC8653123. <https://www.ncbi.nlm.nih.gov/pubmed/34617315>
924. Chamling B, Vehof V, Drakos S, et al. Occurrence of acute infarct-like myocarditis following COVID-19 vaccination: just an accidental co-incidence or rather vaccination-associated autoimmune myocarditis? *Clin Res Cardiol.* 2021 Nov;110(11):1850-1854. doi: 10.1007/s00392-021-01916-w. Epub 2021 Jul 31. PMID: 34333695; PMCID: PMC8325525. <https://www.ncbi.nlm.nih.gov/pubmed/34333695>
925. Chang JC, Hawley HB. Vaccine-Associated Thrombocytopenia and Thrombosis: Venous Endotheliopathy Leading to Venous Combined Micro-Macrothrombosis. *Medicina (Kaunas).* 2021 Oct 26;57(11):1163. doi: 10.3390/medicina57111163. PMID: 34833382; PMCID: PMC8621006. <https://www.ncbi.nlm.nih.gov/pubmed/34833382>
926. Dimopoulou D, Spyridis N, Vartzelis G, et al. Safety and tolerability of the COVID-19 messenger RNA vaccine in adolescents with juvenile idiopathic arthritis treated with

- tumor necrosis factor inhibitors. *Arthritis Rheumatol.* 2022 Feb;74(2):365-366. doi: 10.1002/art.41977. Epub 2022 Jan 4. PMID: 34492161; PMCID: PMC8653078. <https://www.ncbi.nlm.nih.gov/pubmed/34492161>
927. Dimopoulou D, Vartzelis G, Dasoula F, et al. Immunogenicity of the COVID-19 mRNA vaccine in adolescents with juvenile idiopathic arthritis on treatment with TNF inhibitors. *Ann Rheum Dis.* 2021 Nov 29;annrheumdis-2021-221607. doi: 10.1136/annrheumdis-2021-221607. Epub ahead of print. PMID: 34844930. <https://www.ncbi.nlm.nih.gov/pubmed/34844930>
928. Ehrlich P, Klingel K, Ohlmann-Knafo S, et al. Biopsy-proven lymphocytic myocarditis following first mRNA COVID-19 vaccination in a 40-year-old male: case report. *Clin Res Cardiol.* 2021 Nov;110(11):1855-1859. doi: 10.1007/s00392-021-01936-6. Epub 2021 Sep 6. PMID: 34487236; PMCID: PMC8419377. <https://www.ncbi.nlm.nih.gov/pubmed/34487236>
929. El Sahly HM, Baden LR, Essink B, et al. Efficacy of the mRNA-1273 SARS-CoV-2 Vaccine at Completion of Blinded Phase. *N Engl J Med.* 2021 Nov 4;385(19):1774-1785. doi: 10.1056/NEJMoa2113017. Epub 2021 Sep 22. PMID: 34551225; PMCID: PMC8482810. <https://www.ncbi.nlm.nih.gov/pubmed/34551225>
930. Facetti S, Giraldi M, Vecchi AL, et al. Miocardite acuta in giovane adulto due giorni dopo vaccino Pfizer [Acute myocarditis in a young adult two days after Pfizer vaccination]. *G Ital Cardiol (Rome).* 2021 Nov;22(11):891-893. Italian. doi: 10.1714/3689.36746. PMID: 34709227. <https://www.ncbi.nlm.nih.gov/pubmed/34709227>
931. Fazlollahi A, Zahmatyar M, Noori M, et al. Cardiac complications following mRNA COVID-19 vaccines: A systematic review of case reports and case series. *Rev Med Virol.* 2021 Dec 17:e2318. doi: 10.1002/rmv.2318. Epub ahead of print. PMID: 34921468. <https://www.ncbi.nlm.nih.gov/pubmed/34921468>
932. Fazolo T, Lima K, Fontoura JC, et al. Pediatric COVID-19 patients in South Brazil show abundant viral mRNA and strong specific anti-viral responses. *Nat Commun.* 2021 Nov 25;12(1):6844. doi: 10.1038/s41467-021-27120-y. PMID: 34824230; PMCID: PMC8617275. <https://www.ncbi.nlm.nih.gov/pubmed/34824230>
933. Fikenzer S, Laufs U. Correction to: Response to Letter to the editors referring to Fikenzer, S., Uhe, T., Lavall, D., Rudolph, U., Falz, R., Busse, M., Hepp, P., & Laufs, U. (2020). Effects of surgical and FFP2/N95 face masks on cardiopulmonary exercise capacity. *Clinical research in cardiology: official journal of the German Cardiac Society*, 1-9. Advance online publication. <https://doi.org/10.1007/s00392-020-01704-y>. *Clin Res Cardiol.* 2021 Aug;110(8):1352. doi: 10.1007/s00392-021-01896-x. Erratum for: *Clin Res Cardiol.* 2020 Dec;109(12):1600. PMID: 34170372; PMCID: PMC8318943. <https://www.ncbi.nlm.nih.gov/pubmed/34170372>

934. Foltran D, Delmas C, Flumian C, et al. Myocarditis and Pericarditis in Adolescents after First and Second doses of mRNA COVID-19 Vaccines. *Eur Heart J Qual Care Clin Outcomes*. 2021 Nov 26;qcab090. doi: 10.1093/ehjqcco/qcab090. Epub ahead of print. PMID: 34849667; PMCID: PMC8690190. <https://www.ncbi.nlm.nih.gov/pubmed/34849667>
935. Forgacs D, Jang H, Abreu RB, et al. SARS-CoV-2 mRNA Vaccines Elicit Different Responses in Immunologically Naïve and Pre-Immune Humans. *Front Immunol*. 2021 Sep 27;12:728021. doi: 10.3389/fimmu.2021.728021. PMID: 34646267; PMCID: PMC8502960. <https://www.ncbi.nlm.nih.gov/pubmed/34646267>
936. Furer V, Eviatar T, Zisman D, et al. Immunogenicity and safety of the BNT162b2 mRNA COVID-19 vaccine in adult patients with autoimmune inflammatory rheumatic diseases and in the general population: a multicentre study. *Ann Rheum Dis*. 2021 Oct;80(10):1330-1338. doi: 10.1136/annrheumdis-2021-220647. Epub 2021 Jun 14. PMID: 34127481; PMCID: PMC8206170. <https://www.ncbi.nlm.nih.gov/pubmed/34127481>
937. Galindo R, Chow H, Rongkavilit C. COVID-19 in Children: Clinical Manifestations and Pharmacologic Interventions Including Vaccine Trials. *Pediatr Clin North Am*. 2021 Oct;68(5):961-976. doi: 10.1016/j.pcl.2021.05.004. Epub 2021 May 18. PMID: 34538306; PMCID: PMC8130516. <https://www.ncbi.nlm.nih.gov/pubmed/34538306>
938. Hause AM, Gee J, Baggs J, et al. COVID-19 Vaccine Safety in Adolescents Aged 12-17 Years - United States, December 14, 2020-July 16, 2021. *MMWR Morb Mortal Wkly Rep*. 2021 Aug 6;70(31):1053-1058. doi: 10.15585/mmwr.mm7031e1. PMID: 34351881; PMCID: PMC8367318. <https://www.ncbi.nlm.nih.gov/pubmed/34351881>
939. Helms JM, Ansteatt KT, Roberts JC, et al. Severe, Refractory Immune Thrombocytopenia Occurring After SARS-CoV-2 Vaccine. *J Blood Med*. 2021 Apr 6;12:221-224. doi: 10.2147/JBM.S307047. PMID: 33854395; PMCID: PMC8040692. <https://www.ncbi.nlm.nih.gov/pubmed/33854395>
940. Hippisley-Cox J, Patone M, Mei XW, et al. Risk of thrombocytopenia and thromboembolism after covid-19 vaccination and SARS-CoV-2 positive testing: self-controlled case series study. *BMJ*. 2021 Aug 26;374:n1931. doi: 10.1136/bmj.n1931. PMID: 34446426; PMCID: PMC8388189. <https://www.ncbi.nlm.nih.gov/pubmed/34446426>
941. Ho JS, Sia CH, Ngiam JN, et al. A review of COVID-19 vaccination and the reported cardiac manifestations. *Singapore Med J*. 2021 Nov 19. doi: 10.11622/smedj.2021210. Epub ahead of print. PMID: 34808708. <https://www.ncbi.nlm.nih.gov/pubmed/34808708>

942. Iguchi T, Umeda H, Kojima M, et al. Cumulative Adverse Event Reporting of Anaphylaxis After mRNA COVID-19 Vaccine (Pfizer-BioNTech) Injections in Japan: The First-Month Report. *Drug Saf.* 2021 Nov;44(11):1209-1214. doi: 10.1007/s40264-021-01104-9. Epub 2021 Aug 4. PMID: 34347278; PMCID: PMC8335977.
<https://www.ncbi.nlm.nih.gov/pubmed/34347278>
943. In brief: Myocarditis with the Pfizer/BioNTech and Moderna COVID-19 vaccines. *Med Lett Drugs Ther.* 2021 Jul 26;63(1629):e9. PMID: 34544112. <https://www.ncbi.nlm.nih.gov/pubmed/34544112><https://www.ncbi.nlm.nih.gov/pubmed/34544112>
944. Ioannou A. Myocarditis should be considered in those with a troponin rise and unobstructed coronary arteries following Pfizer-BioNTech COVID-19 vaccination. *QJM.* 2021 Aug 31;hcab231. doi: 10.1093/qjmed/hcab231. Epub ahead of print. PMID: 34463755; PMCID: PMC8499841. <https://www.ncbi.nlm.nih.gov/pubmed/34463755>
945. Ioannou A. T2 mapping should be utilised in cases of suspected myocarditis to confirm an acute inflammatory process. *QJM.* 2021 Dec 21;hcab326. doi: 10.1093/qjmed/hcab326. Epub ahead of print. PMID: 34931681. <https://www.ncbi.nlm.nih.gov/pubmed/34931681>
946. Isaak A, Feisst A, Luetkens JA. Myocarditis Following COVID-19 Vaccination. *Radiology.* 2021 Oct;301(1):E378-E379. doi: 10.1148/radiol.2021211766. Epub 2021 Aug 3. PMID: 34342500; PMCID: PMC8369878. <https://www.ncbi.nlm.nih.gov/pubmed/34342500>
947. Istampoulouoglou I, Dimitriou G, Späni S, et al. Myocarditis and pericarditis in association with COVID-19 mRNA-vaccination: cases from a regional pharmacovigilance centre. *Glob Cardiol Sci Pract.* 2021 Oct 30;2021(3):e202118. doi: 10.21542/gcsp.2021.18. PMID: 34805376; PMCID: PMC8587334. <https://www.ncbi.nlm.nih.gov/pubmed/34805376>
948. Jaafar R, Boschi C, Aherfi S, et al. High Individual Heterogeneity of Neutralizing Activities against the Original Strain and Nine Different Variants of SARS-CoV-2. *Viruses.* 2021 Oct 28;13(11):2177. doi: 10.3390/v13112177. PMID: 34834983; PMCID: PMC8623169. <https://www.ncbi.nlm.nih.gov/pubmed/34834983>
949. Jain SS, Steele JM, Fonseca B, et al. COVID-19 Vaccination-Associated Myocarditis in Adolescents. *Pediatrics.* 2021 Nov;148(5):e2021053427. doi: 10.1542/peds.2021-053427. Epub 2021 Aug 13. PMID: 34389692. <https://www.ncbi.nlm.nih.gov/pubmed/34389692>
950. Jhaveri R, Adler-Shohet FC, Blyth CC, et al. Weighing the Risks of Perimyocarditis With the Benefits of SARS-CoV-2 mRNA Vaccination in Adolescents. *J Pediatric Infect Dis Soc.* 2021 Nov 11;10(10):937-939. doi: 10.1093/jpids/piab061. PMID: 34270752; PMCID: PMC8344506.. <https://www.ncbi.nlm.nih.gov/pubmed/34270752>

951. Klein NP, Lewis N, Goddard K, et al. Surveillance for Adverse Events After COVID-19 mRNA Vaccination. *JAMA*. 2021 Oct 12;326(14):1390-1399. doi: 10.1001/jama.2021.15072. PMID: 34477808; PMCID: PMC8511971. <https://www.ncbi.nlm.nih.gov/pubmed/34477808>
952. Klimek L, Bergmann KC, Brehler R, et al. Practical handling of allergic reactions to COVID-19 vaccines: A position paper from German and Austrian Allergy Societies AeDA, DGAKI, GPA and ÖGAI. *Allergo J Int*. 2021 Apr 19;1-17. doi: 10.1007/s40629-021-00165-7. Epub ahead of print. PMID: 33898162; PMCID: PMC8054127. <https://www.ncbi.nlm.nih.gov/pubmed/33898162>
953. Klimek L, Novak N, Hamelmann E, et al. Severe allergic reactions after COVID-19 vaccination with the Pfizer/BioNTech vaccine in Great Britain and USA: Position statement of the German Allergy Societies: Medical Association of German Allergologists (AeDA), German Society for Allergology and Clinical Immunology (DGAKI) and Society for Pediatric Allergology and Environmental Medicine (GPA). *Allergo J Int*. 2021;30(2):51-55. doi: 10.1007/s40629-020-00160-4. Epub 2021 Feb 24. PMID: 33643776; PMCID: PMC7903024. <https://www.ncbi.nlm.nih.gov/pubmed/33643776>
954. Kohli U, Desai L, Chowdhury D, et al. mRNA Coronavirus-19 Vaccine-Associated Myopericarditis in Adolescents: A Survey Study. *J Pediatr*. 2021 Dec 22:S0022-3476(21)01231-2. doi: 10.1016/j.jpeds.2021.12.025. Epub ahead of print. PMID: 34952008; PMCID: PMC8691954. <https://www.ncbi.nlm.nih.gov/pubmed/34952008>
955. Kostoff RN, Calina D, Kanduc D, et al. Erratum to "Why are we vaccinating children against COVID-19?" [Toxicol. Rep. 8C (2021) 1665-1684 / 1193]. *Toxicol Rep*. 2021;8:1981. doi: 10.1016/j.toxrep.2021.10.003. Epub 2021 Oct 7. Erratum for: *Toxicol Rep*. 2021;8:1665-1684. PMID: 34642628; PMCID: PMC8496904. <https://www.ncbi.nlm.nih.gov/pubmed/34642628>
956. Kremsner PG, Mann P, Kroidl A, et al. Safety and immunogenicity of an mRNA-lipid nanoparticle vaccine candidate against SARS-CoV-2 : A phase 1 randomized clinical trial. *Wien Klin Wochenschr*. 2021 Sep;133(17-18):931-941. doi: 10.1007/s00508-021-01922-y. Epub 2021 Aug 10. PMID: 34378087; PMCID: PMC8354521. <https://www.ncbi.nlm.nih.gov/pubmed/34378087>
957. Kustin T, Harel N, Finkel U, et al. Evidence for increased breakthrough rates of SARS-CoV-2 variants of concern in BNT162b2-mRNA-vaccinated individuals. *Nat Med*. 2021 Aug;27(8):1379-1384. doi: 10.1038/s41591-021-01413-7. Epub 2021 Jun 14. PMID: 34127854; PMCID: PMC8363499. <https://www.ncbi.nlm.nih.gov/pubmed/34127854>
958. Kwan MYW, Chua GT, Chow CB, et al. mRNA COVID vaccine and myocarditis in adolescents. *Hong Kong Med J*. 2021 Oct;27(5):326-327. doi: 10.12809/hkmj215120. Epub 2021 Aug 16. PMID: 34393110. <https://www.ncbi.nlm.nih.gov/pubmed/34393110>

959. Lee E, Chew NWS, Ng P, et al. Reply to "Letter to the editor: Myocarditis should be considered in those with a troponin rise and unobstructed coronary arteries following PfizerBioNTech COVID-19 vaccination". QJM. 2021 Aug 31;hcab232. doi: 10.1093/qjmed/hcab232. Epub ahead of print. PMID: 34463770; PMCID: PMC8499842. <https://www.ncbi.nlm.nih.gov/pubmed/34463770>
960. Lee EJ, Cines DB, Gernsheimer T, et al. Thrombocytopenia following Pfizer and Moderna SARS-CoV-2 vaccination. Am J Hematol. 2021 May 1;96(5):534-537. doi: 10.1002/ajh.26132. Epub 2021 Mar 9. PMID: 33606296; PMCID: PMC8014568.. <https://www.ncbi.nlm.nih.gov/pubmed/33606296>
961. Levin D, Shimon G, Fadlon-Derai M, et al. Myocarditis following COVID-19 vaccination - A case series. Vaccine. 2021 Oct 8;39(42):6195-6200. doi: 10.1016/j.vaccine.2021.09.004. Epub 2021 Sep 4. PMID: 34535317; PMCID: PMC8416687. <https://www.ncbi.nlm.nih.gov/pubmed/34535317>
962. Li J, Hui A, Zhang X, et al. Safety and immunogenicity of the SARS-CoV-2 BNT162b1 mRNA vaccine in younger and older Chinese adults: a randomized, placebo-controlled, double-blind phase 1 study. Nat Med. 2021 Jun;27(6):1062-1070. doi: 10.1038/s41591-021-01330-9. Epub 2021 Apr 22. PMID: 33888900.. <https://www.ncbi.nlm.nih.gov/pubmed/33888900>
963. Li M, Yuan J, Lv G, et al. Myocarditis and Pericarditis following COVID-19 Vaccination: Inequalities in Age and Vaccine Types. J Pers Med. 2021 Oct 28;11(11):1106. doi: 10.3390/jpm11111106. PMID: 34834458; PMCID: PMC8624452.. <https://www.ncbi.nlm.nih.gov/pubmed/34834458>
964. Lim Y, Kim MC, Kim KH, et al. Case Report: Acute Fulminant Myocarditis and Cardiogenic Shock After Messenger RNA Coronavirus Disease 2019 Vaccination Requiring Extracorporeal Cardiopulmonary Resuscitation. Front Cardiovasc Med. 2021 Oct 29;8:758996. doi: 10.3389/fcvm.2021.758996. PMID: 34778411; PMCID: PMC8586196. <https://www.ncbi.nlm.nih.gov/pubmed/34778411>
965. Long SS. Important Insights into Myopericarditis after the Pfizer mRNA COVID-19 Vaccination in Adolescents. J Pediatr. 2021 Nov;238:5. doi: 10.1016/j.jpeds.2021.07.057. Epub 2021 Jul 29. PMID: 34332972; PMCID: PMC8440228. <https://www.ncbi.nlm.nih.gov/pubmed/34332972>
966. Luk A, Clarke B, Dahdah N, et al. Myocarditis and Pericarditis After COVID-19 mRNA Vaccination: Practical Considerations for Care Providers. Can J Cardiol. 2021 Oct;37(10):1629-1634. doi: 10.1016/j.cjca.2021.08.001. Epub 2021 Aug 8. PMID: 34375696; PMCID: PMC8349442. <https://www.ncbi.nlm.nih.gov/pubmed/34375696>

967. Madelon N, Lauper K, Breville G, et al. Robust T cell responses in anti-CD20 treated patients following COVID-19 vaccination: a prospective cohort study. *Clin Infect Dis*. 2021 Nov 17;ciab954. doi: 10.1093/cid/ciab954. Epub ahead of print. PMID: 34791081; PMCID: PMC8767893.. <https://www.ncbi.nlm.nih.gov/pubmed/34791081>
968. Mangat C, Milosavljevic N. BNT162b2 Vaccination during Pregnancy Protects Both the Mother and Infant: Anti-SARS-CoV-2 S Antibodies Persistently Positive in an Infant at 6 Months of Age. *Case Rep Pediatr*. 2021 Oct 12;2021:6901131. doi: 10.1155/2021/6901131. PMID: 34676123; PMCID: PMC8526266. <https://www.ncbi.nlm.nih.gov/pubmed/34676123>
969. Mark C, Gupta S, Punnett A, et al. Safety of administration of BNT162b2 mRNA (Pfizer-BioNTech) COVID-19 vaccine in youths and young adults with a history of acute lymphoblastic leukemia and allergy to PEG-asparaginase. *Pediatr Blood Cancer*. 2021 Nov;68(11):e29295. doi: 10.1002/pbc.29295. Epub 2021 Aug 16. PMID: 34398511; PMCID: PMC8441639. <https://www.ncbi.nlm.nih.gov/pubmed/34398511>
970. Martins-Filho PR, Quintans-Júnior LJ, de Souza Araújo AA, et al. Socio-economic inequalities and COVID-19 incidence and mortality in Brazilian children: a nationwide register-based study. *Public Health*. 2021 Jan;190:4-6. doi: 10.1016/j.puhe.2020.11.005. Epub 2020 Dec 11. PMID: 33316478; PMCID: PMC7833565. <https://www.ncbi.nlm.nih.gov/pubmed/33316478>
971. McLean K, Johnson TJ. Myopericarditis in a previously healthy adolescent male following COVID-19 vaccination: A case report. *Acad Emerg Med*. 2021 Aug;28(8):918-921. doi: 10.1111/acem.14322. Epub 2021 Jul 21. PMID: 34133825; PMCID: PMC8441784. <https://www.ncbi.nlm.nih.gov/pubmed/34133825>
972. Mevorach D, Anis E, Cedar N, et al. Myocarditis after BNT162b2 mRNA Vaccine against Covid-19 in Israel. *N Engl J Med*. 2021 Dec 2;385(23):2140-2149. doi: 10.1056/NEJMoa2109730. Epub 2021 Oct 6. PMID: 34614328; PMCID: PMC8531987. <https://www.ncbi.nlm.nih.gov/pubmed/34614328>
973. Minocha PK, Better D, Singh RK, et al. Recurrence of Acute Myocarditis Temporally Associated with Receipt of the mRNA Coronavirus Disease 2019 (COVID-19) Vaccine in a Male Adolescent. *J Pediatr*. 2021 Nov;238:321-323. doi: 10.1016/j.jpeds.2021.06.035. Epub 2021 Jun 22. PMID: 34166671; PMCID: PMC8216855. <https://www.ncbi.nlm.nih.gov/pubmed/34166671>
974. Mizrahi B, Lotan R, Kalkstein N, et al. Correlation of SARS-CoV-2-breakthrough infections to time-from-vaccine. *Nat Commun*. 2021 Nov 4;12(1):6379. doi: 10.1038/s41467-021-26672-3. PMID: 34737312; PMCID: PMC8569006. <https://www.ncbi.nlm.nih.gov/pubmed/34737312>

975. Moffitt K, Cheung E, Yeung T, etc. Analysis of Staphylococcus aureus Transcriptome in Pediatric Soft Tissue Abscesses and Comparison to Murine Infections. *Infect Immun*. 2021 Mar 17;89(4):e00715-20. doi: 10.1128/IAI.00715-20. PMID: 33526560; PMCID: PMC8090966. <https://www.ncbi.nlm.nih.gov/pubmed/33526560>
976. Mohamed L, Madsen AMR, Scholtz-Buchholzer F, et al. Reactivation of BCG vaccination scars after vaccination with mRNA-Covid-vaccines: two case reports. *BMC Infect Dis*. 2021 Dec 20;21(1):1264. doi: 10.1186/s12879-021-06949-0. PMID: 34930152; PMCID: PMC8685493. <https://www.ncbi.nlm.nih.gov/pubmed/34930152>
977. Montgomery J, Ryan M, Engler R, et al. Myocarditis Following Immunization With mRNA COVID-19 Vaccines in Members of the US Military. *JAMA Cardiol*. 2021 Oct 1;6(10):1202-1206. doi: 10.1001/jamacardio.2021.2833. PMID: 34185045; PMCID: PMC8243257. <https://www.ncbi.nlm.nih.gov/pubmed/34185045>
978. Ntouro PA, Vlachogiannis NI, Pappa M, et al. Effective DNA damage response after acute but not chronic immune challenge: SARS-CoV-2 vaccine versus Systemic Lupus Erythematosus. *Clin Immunol*. 2021 Aug;229:108765. doi: 10.1016/j.clim.2021.108765. Epub 2021 Jun 2. PMID: 34089859; PMCID: PMC8171000. <https://www.ncbi.nlm.nih.gov/pubmed/34089859>
979. Nygaard U, Holm M, Bohnstedt C, et al. Population-based Incidence of Myopericarditis After COVID-19 Vaccination in Danish Adolescents. *Pediatr Infect Dis J*. 2022 Jan 1;41(1):e25-e28. doi: 10.1097/INF.0000000000003389. PMID: 34889875; PMCID: PMC8658061. <https://www.ncbi.nlm.nih.gov/pubmed/34889875>
980. Oberhardt V, Luxenburger H, Kemming J, et al. Rapid and stable mobilization of CD8+ T cells by SARS-CoV-2 mRNA vaccine. *Nature*. 2021 Sep;597(7875):268-273. doi: 10.1038/s41586-021-03841-4. Epub 2021 Jul 28. PMID: 34320609; PMCID: PMC8426185. <https://www.ncbi.nlm.nih.gov/pubmed/34320609>
981. Park H, Yun KW, Kim KR, et al. Epidemiology and Clinical Features of Myocarditis/Pericarditis before the Introduction of mRNA COVID-19 Vaccine in Korean Children: a Multicenter Study. *J Korean Med Sci*. 2021 Aug 16;36(32):e232. doi: 10.3346/jkms.2021.36.e232. PMID: 34402230; PMCID: PMC8369310. <https://www.ncbi.nlm.nih.gov/pubmed/34402230>
982. Park J, Brekke DR, Bratincsak A. Self-limited myocarditis presenting with chest pain and ST segment elevation in adolescents after vaccination with the BNT162b2 mRNA vaccine. *Cardiol Young*. 2022 Jan;32(1):146-149. doi: 10.1017/S1047951121002547. Epub 2021 Jun 28. PMID: 34180390. <https://www.ncbi.nlm.nih.gov/pubmed/34180390>

983. Patel YR, Louis DW, Atalay M, et al. Cardiovascular magnetic resonance findings in young adult patients with acute myocarditis following mRNA COVID-19 vaccination: a case series. *J Cardiovasc Magn Reson*. 2021 Sep 9;23(1):101. doi: 10.1186/s12968-021-00795-4. PMID: 34496880; PMCID: PMC8425992. <https://www.ncbi.nlm.nih.gov/pubmed/34496880>
984. Patone M, Mei XW, Handunnetthi L, et al. Risks of myocarditis, pericarditis, and cardiac arrhythmias associated with COVID-19 vaccination or SARS-CoV-2 infection. *Nat Med*. 2021 Dec 14. doi: 10.1038/s41591-021-01630-0. Epub ahead of print. PMID: 34907393. <https://www.ncbi.nlm.nih.gov/pubmed/34907393>
985. Patrignani A, Schicchi N, Calcagnoli F, et al. Acute myocarditis following Comirnaty vaccination in a healthy man with previous SARS-CoV-2 infection. *Radiol Case Rep*. 2021 Nov;16(11):3321-3325. doi: 10.1016/j.radcr.2021.07.082. Epub 2021 Aug 2. PMID: 34367386; PMCID: PMC8326008. <https://www.ncbi.nlm.nih.gov/pubmed/34367386>
986. Perez Y, Levy ER, Joshi AY, et al. Myocarditis Following COVID-19 mRNA Vaccine: A Case Series and Incidence Rate Determination. *Clin Infect Dis*. 2021 Nov 3:ciab926. doi: 10.1093/cid/ciab926. Epub ahead of print. PMID: 34734240; PMCID: PMC8767838. <https://www.ncbi.nlm.nih.gov/pubmed/34734240>
987. Perrotta A, Biondi-Zoccai G, Saade W, et al. A snapshot global survey on side effects of COVID-19 vaccines among healthcare professionals and armed forces with a focus on headache. *Panminerva Med*. 2021 Sep;63(3):324-331. doi: 10.23736/S0031-0808.21.04435-9. PMID: 34738774. <https://www.ncbi.nlm.nih.gov/pubmed/34738774>
988. Piñana JL, López-Corral L, Martino R, et al. Infectious Complications Subcommittee of the Spanish Hematopoietic Stem Cell Transplantation and Cell Therapy Group (GETH-TC). SARS-CoV-2-reactive antibody detection after SARS-CoV-2 vaccination in hematopoietic stem cell transplant recipients: Prospective survey from the Spanish Hematopoietic Stem Cell Transplantation and Cell Therapy Group. *Am J Hematol*. 2022 Jan 1;97(1):30-42. doi: 10.1002/ajh.26385. Epub 2021 Nov 2. PMID: 34695229; PMCID: PMC8646900. <https://www.ncbi.nlm.nih.gov/pubmed/34695229>
989. Revon-Riviere G, Ninove L, Min V, et al. The BNT162b2 mRNA COVID-19 vaccine in adolescents and young adults with cancer: A monocentric experience. *Eur J Cancer*. 2021 Sep;154:30-34. doi: 10.1016/j.ejca.2021.06.002. Epub 2021 Jun 23. PMID: 34233234; PMCID: PMC8220943. <https://www.ncbi.nlm.nih.gov/pubmed/34233234>
990. Sanchez Tijmes F, Thavendiranathan P, Udell JA, et al. Cardiac MRI Assessment of Nonischemic Myocardial Inflammation: State of the Art Review and Update on Myocarditis Associated with COVID-19 Vaccination. *Radiol Cardiothorac Imaging*. 2021 Nov 18;3(6):e210252. doi: 10.1148/ryct.210252. PMID: 34934954; PMCID: PMC8686006. <https://www.ncbi.nlm.nih.gov/pubmed/34934954>

991. Schauer J, Buddhe S, Colyer J, et al. Myopericarditis After the Pfizer Messenger Ribonucleic Acid Coronavirus Disease Vaccine in Adolescents. *J Pediatr*. 2021 Nov;238:317-320. doi: 10.1016/j.jpeds.2021.06.083. Epub 2021 Jul 3. PMID: 34228985; PMCID: PMC8253718.
992. Schauer J, Buddhe S, Colyer J, et al. Myopericarditis After the Pfizer Messenger Ribonucleic Acid Coronavirus Disease Vaccine in Adolescents. *J Pediatr*. 2021 Nov;238:317-320. doi: 10.1016/j.jpeds.2021.06.083. Epub 2021 Jul 3. PMID: 34228985; PMCID: PMC8253718. <https://www.ncbi.nlm.nih.gov/pubmed/34228985>
993. Schneider J, Sottmann L, Greinacher A, et al. Postmortem investigation of fatalities following vaccination with COVID-19 vaccines. *Int J Legal Med*. 2021 Nov;135(6):2335-2345. doi: 10.1007/s00414-021-02706-9. Epub 2021 Sep 30. PMID: 34591186; PMCID: PMC8482743. <https://www.ncbi.nlm.nih.gov/pubmed/34591186>
994. Schramm R, Costard-Jäckle A, Rivinius R, et al. Poor humoral and T-cell response to two-dose SARS-CoV-2 messenger RNA vaccine BNT162b2 in cardiothoracic transplant recipients. *Clin Res Cardiol*. 2021 Aug;110(8):1142-1149. doi: 10.1007/s00392-021-01880-5. Epub 2021 Jul 9. PMID: 34241676; PMCID: PMC8267767. <https://www.ncbi.nlm.nih.gov/pubmed/34241676>
995. Sessa F, Salerno M, Esposito M, et al. Autopsy Findings and Causality Relationship between Death and COVID-19 Vaccination: A Systematic Review. *J Clin Med*. 2021 Dec 15;10(24):5876. doi: 10.3390/jcm10245876. PMID: 34945172; PMCID: PMC8709364. <https://www.ncbi.nlm.nih.gov/pubmed/34945172>
996. Sharif N, Alzahrani KJ, Ahmed SN, Dey SK. Efficacy, Immunogenicity and Safety of COVID-19 Vaccines: A Systematic Review and Meta-Analysis. *Front Immunol*. 2021 Oct 11;12:714170. doi: 10.3389/fimmu.2021.714170. PMID: 34707602; PMCID: PMC8542872. <https://www.ncbi.nlm.nih.gov/pubmed/34707602>
997. Shay DK, Gee J, Su JR, et al. Safety Monitoring of the Janssen (Johnson & Johnson) COVID-19 Vaccine - United States, March-April 2021. *MMWR Morb Mortal Wkly Rep*. 2021 May 7;70(18):680-684. doi: 10.15585/mmwr.mm7018e2. PMID: 33956784. <https://www.ncbi.nlm.nih.gov/pubmed/33956784>
998. Shazley O, Alshazley M. A COVID-Positive 52-Year-Old Man Presented With Venous Thromboembolism and Disseminated Intravascular Coagulation Following Johnson & Johnson Vaccination: A Case-Study. *Cureus*. 2021 Jul 14;13(7):e16383. doi: 10.7759/cureus.16383. PMID: 34408937; PMCID: PMC8362796. <https://www.ncbi.nlm.nih.gov/pubmed/34408937>

999. Shiyovich A, Witberg G, Aviv Y, Eisen A, et al. Myocarditis following COVID-19 vaccination: magnetic resonance imaging study. *Eur Heart J Cardiovasc Imaging*. 2021 Nov 5;jeab230. doi: 10.1093/ehjci/jeab230. Epub ahead of print. PMID: 34739045. <https://www.ncbi.nlm.nih.gov/pubmed/34739045>
1000. Simone A, Herald J, Chen A, et al. Acute Myocarditis Following COVID-19 mRNA Vaccination in Adults Aged 18 Years or Older. *JAMA Intern Med*. 2021 Dec 1;181(12):1668-1670. doi: 10.1001/jamainternmed.2021.5511. PMID: 34605853; PMCID: PMC8491129. <https://www.ncbi.nlm.nih.gov/pubmed/34605853>
1001. Singer ME, Taub IB, Kaelber DC. Risk of Myocarditis from COVID-19 Infection in People Under Age 20: A Population-Based Analysis. *medRxiv [Preprint]*. 2021 Jul 27:2021.07.23.21260998. doi: 10.1101/2021.07.23.21260998. PMID: 34341797; PMCID: PMC8328065. <https://www.ncbi.nlm.nih.gov/pubmed/34341797>
1002. Smith C, Odd D, Harwood R, et al. Deaths in children and young people in England after SARS-CoV-2 infection during the first pandemic year. *Nat Med*. 2022 Jan;28(1):185-192. doi: 10.1038/s41591-021-01578-1. Epub 2021 Nov 11. PMID: 34764489. <https://www.ncbi.nlm.nih.gov/pubmed/34764489>
1003. Snapiri O, Rosenberg Danziger C, Shirman N, et al. Transient Cardiac Injury in Adolescents Receiving the BNT162b2 mRNA COVID-19 Vaccine. *Pediatr Infect Dis J*. 2021 Oct 1;40(10):e360-e363. doi: 10.1097/INF.0000000000003235. PMID: 34077949; PMCID: PMC8443419. <https://www.ncbi.nlm.nih.gov/pubmed/34077949>
1004. Spinner JA, Julien CL, Olayinka L, et al. SARS-CoV-2 anti-spike antibodies after vaccination in pediatric heart transplantation: A first report. *J Heart Lung Transplant*. 2022 Feb;41(2):133-136. doi: 10.1016/j.healun.2021.11.001. Epub 2021 Nov 14. PMID: 34911654; PMCID: PMC8590844. <https://www.ncbi.nlm.nih.gov/pubmed/34911654>
1005. Starekova J, Bluemke DA, Bradham WS, et al. Myocarditis Associated with mRNA COVID-19 Vaccination. *Radiology*. 2021 Nov;301(2):E409-E411. doi: 10.1148/radiol.2021211430. Epub 2021 Jul 20. PMID: 34282971; PMCID: PMC8574056. <https://www.ncbi.nlm.nih.gov/pubmed/34282971>
1006. Sulemankhil I, Abdelrahman M, Negi SI. Temporal association between the COVID-19 Ad26.COV2.S vaccine and acute myocarditis: A case report and literature review. *Cardiovasc Revasc Med*. 2021 Aug 16:S1553-8389(21)00578-9. doi: 10.1016/j.carrev.2021.08.012. Epub ahead of print. PMID: 34420869; PMCID: PMC8364889. <https://www.ncbi.nlm.nih.gov/pubmed/34420869>

1007. Tailor PD, Feighery AM, El-Sabawi B, Prasad A. Case report: acute myocarditis following the second dose of mRNA-1273 SARS-CoV-2 vaccine. *Eur Heart J Case Rep.* 2021 Aug 4;5(8):ytab319. doi: 10.1093/ehjcr/ytab319. PMID: 34514306; PMCID: PMC8422333. <https://www.ncbi.nlm.nih.gov/pubmed/34514306>
1008. Takeda M, Ishio N, Shoji T, et al. Eosinophilic Myocarditis Following Coronavirus Disease 2019 (COVID-19) Vaccination. *Circ J.* 2021 Dec 25. doi: 10.1253/circj.CJ-21-0935. Epub ahead of print. PMID: 34955479. <https://www.ncbi.nlm.nih.gov/pubmed/34955479>
1009. CDC COVID-19 Response Team; Food and Drug Administration. Allergic Reactions Including Anaphylaxis After Receipt of the First Dose of Pfizer-BioNTech COVID-19 Vaccine - United States, December 14-23, 2020. *MMWR Morb Mortal Wkly Rep.* 2021 Jan 15;70(2):46-51. doi: 10.15585/mmwr.mm7002e1. PMID: 33444297; PMCID: PMC7808711. <https://www.ncbi.nlm.nih.gov/pubmed/33444297>
1010. Thompson MG, Burgess JL, Naleway AL, et al. Prevention and Attenuation of Covid-19 with the BNT162b2 and mRNA-1273 Vaccines. *N Engl J Med.* 2021 Jul 22;385(4):320-329. doi: 10.1056/NEJMoa2107058. Epub 2021 Jun 30. PMID: 34192428; PMCID: PMC8262622. <https://www.ncbi.nlm.nih.gov/pubmed/34192428>
1011. Weitzman ER, Sherman AC, Levy O. SARS-CoV-2 mRNA Vaccine Attitudes as Expressed in U.S. FDA Public Commentary: Need for a Public-Private Partnership in a Learning Immunization System. *Front Public Health.* 2021 Jul 16;9:695807. doi: 10.3389/fpubh.2021.695807. PMID: 34336774; PMCID: PMC8322674. <https://www.ncbi.nlm.nih.gov/pubmed/34336774>
1012. Witberg G, Barda N, Hoss S, Richter I, Wiessman M, Aviv Y, Grinberg T, Auster O, Dagan N, Balicer RD, Kornowski R. Myocarditis after Covid-19 Vaccination in a Large Health Care Organization. *N Engl J Med.* 2021 Dec 2;385(23):2132-2139. doi: 10.1056/NEJMoa2110737. Epub 2021 Oct 6. PMID: 34614329; PMCID: PMC8531986. <https://www.ncbi.nlm.nih.gov/pubmed/34614329>
1013. Zimmermann P, Curtis N. Why is COVID-19 less severe in children? A review of the proposed mechanisms underlying the age-related difference in severity of SARS-CoV-2 infections. *Arch Dis Child.* 2020 Dec 1;archdischild-2020-320338. doi: 10.1136/archdischild-2020-320338. Epub ahead of print. PMID: 33262177. <https://www.ncbi.nlm.nih.gov/pubmed/33262177>