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Research Interests:

- SARS-CoV-2
- Antimicrobial resistance
- Dengue
- Clinical trials

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Biography

Professor David Lye is director of Infectious Disease Research and Training Office at National Centre for Infectious Diseases and deputy executive director, Programme for Research in Epidemic Preparedness and Response. He is professor at Lee Kong Chian School of Medicine and Yong Loo Lin School of Medicine. He is senior consultant, Department of Infectious Diseases, Tan Tock Seng Hospital.

He has chaired the National Antimicrobial Stewardship Expert Panel since 2014. He is a member of National Antimicrobial Resistance Control Committee and One Health Antimicrobial Resistance Project Team, Ministry of Health, Singapore.

Professor Lye is president, Society of Infectious Disease (Singapore) and Asia Pacific Society of Clinical Microbiology and Infection. He is a member of executive committee, International Society of Antimicrobial Chemotherapy, and council of International Society of Infectious Diseases.

Professor Lye has published more than 370 peer-reviewed manuscripts in journals such as NEJM, Lancet, JAMA, Lancet Respiratory Medicine, Lancet Infectious Diseases, Lancet Microbe, Lancet Global Health as well as Science, Nature Biotechnology, Nature Microbiology, Nature Communications, Science Translational Medicine, Journal Clinical Investigation and Journal Experimental Medicine. He is a Clarivate Highly Cited Researcher in 2022 and 2023.

Selected Publications

- Beigel JH, Tomashek KM, Dodd LE, Mehta AK, Zingman BS, Kalil AC, Hohmann E, Chu HY, Luetkemeyer A, Kline S, Lopez de Castilla D, Finberg RW, Dierberg K, Tapson V, Hsieh L, Patterson TF, Paredes R, Sweeney DA, Short WR, Touloumi G, Lye DC, Ohmagari N, Oh MD, Ruiz-Palacios GM, Benfield T, Fätkenheuer G, Kortepeter MG, Atmar RL, Creech CB, Lundgren J, Babiker AG, Pett S, Neaton JD, Burgess TH, Bonnett T, Green M, Makowski M, Osinusi A, Nayak S, Lane HC; ACTT-1 Study Group Members. Remdesivir for the Treatment of Covid-19 - Final Report. *N Engl J Med.* 2020 Nov 5;383(19):1813-1826. doi: 10.1056/NEJMoa2007764. Epub 2020 Oct 8. PMID: 32445440; PMCID: PMC7262788.
https://www.nejm.org/doi/10.1056/NEJMoa2007764?url_ver=Z39.882003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%20%20pubmed
- Goldman JD, Lye DCB, Hui DS, Marks KM, Bruno R, Montejano R, Spinner CD, Galli M, Ahn MY, Nahass RG, Chen YS, SenGupta D, Hyland RH, Osinusi AO, Cao H, Blair C, Wei X, Gaggar A, Brainard DM, Towner WJ, Muñoz J, Mullane KM, Marty FM, Tashima KT, Diaz G, Subramanian A; GS-US-540-5773 Investigators. Remdesivir for 5 or 10 Days in Patients with Severe Covid-19. *N Engl J Med.* 2020 Nov 5;383(19):1827-1837. doi: 10.1056/NEJMoa2015301. Epub 2020 May 27. PMID: 32459919; PMCID: PMC7377062.
<https://www.nejm.org/doi/10.1056/NEJMoa2015301>
- Tan CW, Chia WN, Young BE, Zhu F, Lim BL, Sia WR, Thein TL, Chen MI, Leo YS, Lye DC, Wang LF. Pan-Sarbecovirus Neutralizing Antibodies in BNT162b2-Immunized SARS-CoV-1 Survivors. *N Engl J Med.* 2021 Oct 7;385(15):1401-1406. doi: 10.1056/NEJMoa2108453. Epub 2021 Aug 18. PMID: 34407341; PMCID: PMC8422514.
https://www.nejm.org/doi/10.1056/NEJMoa2108453?url_ver=Z39.882003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%20%20pubmed
- Young BE, Fong SW, Chan YH, Mak TM, Ang LW, Anderson DE, Lee CY, Amrun SN, Lee B, Goh YS, Su YCF, Wei WE, Kalimuddin S, Chai LYA, Pada S, Tan SY, Sun L, Parthasarathy P, Chen YYC, Barkham T, Lin RTP, Maurer-Stroh S, Leo YS, Wang LF, Renia L, Lee VJ, Smith GJD, Lye DC, Ng LFP. Effects of a major deletion in the SARS-CoV-2 genome on the severity of infection and the inflammatory response: an observational cohort study. *Lancet.* 2020 Aug 29;396(10251):603-611. doi: 10.1016/S0140-6736(20)31757-8. Epub 2020 Aug 18. PMID: 32822564; PMCID: PMC7434477.
[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)31757-8/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31757-8/fulltext)
- Tong SYC, Lye DC, Yahav D, Sud A, Robinson JO, Nelson J, Archuleta S, Roberts MA, Cass A, Paterson DL, Foo H, Paul M, Guy SD, Tramontana AR, Walls GB, McBride S, Bak N, Ghosh N, Rogers BA, Ralph AP, Davies J, Ferguson PE, Dotel R, McKew GL, Gray TJ, Holmes NE, Smith S, Warner MS, Kalimuddin S, Young BE, Runnegar N, Andresen DN, Anagnostou NA, Johnson SA, Chatfield MD, Cheng AC, Fowler VG Jr, Howden BP, Meagher N, Price DJ, van Hal SJ, O'Sullivan MVN, Davis JS; Australasian Society for Infectious Diseases Clinical Research Network. Effect of Vancomycin or Daptomycin With vs Without an Antistaphylococcal β -Lactam on Mortality, Bacteremia, Relapse, or Treatment Failure in Patients With MRSA Bacteremia: A Randomized Clinical Trial. *JAMA.* 2020 Feb 11;323(6):527-537. doi: 10.1001/jama.2020.0103. PMID: 32044943; PMCID: PMC7042887.
<https://jamanetwork.com/journals/jama/fullarticle/2760737>

- Young BE, Ong SWX, Kalimuddin S, Low JG, Tan SY, Loh J, Ng OT, Marimuthu K, Ang LW, Mak TM, Lau SK, Anderson DE, Chan KS, Tan TY, Ng TY, Cui L, Said Z, Kurupatham L, Chen MI, Chan M, Vasoo S, Wang LF, Tan BH, Lin RTP, Lee VJM, Leo YS, Lye DC; Singapore 2019 Novel Coronavirus Outbreak Research Team. Epidemiologic Features and Clinical Course of Patients Infected With SARS-CoV-2 in Singapore. *JAMA*. 2020 Apr 21;323(15):1488-1494. doi: 10.1001/jama.2020.3204.
<https://jamanetwork.com/journals/jama/fullarticle/2762688>
- Hansen J, Baum A, Pascal KE, Russo V, Giordano S, Wloga E, Fulton BO, Yan Y, Koon K, Patel K, Chung KM, Hermann A, Ullman E, Cruz J, Rafique A, Huang T, Fairhurst J, Libertiny C, Malbec M, Lee WY, Welsh R, Farr G, Pennington S, Deshpande D, Cheng J, Watty A, Bouffard P, Babb R, Levenkova N, Chen C, Zhang B, Romero Hernandez A, Saotome K, Zhou Y, Franklin M, Sivapalasingam S, Lye DC, Weston S, Logue J, Haupt R, Frieman M, Chen G, Olson W, Murphy AJ, Stahl N, Yancopoulos GD, Kyratsous CA. Studies in humanized mice and convalescent humans yield a SARS-CoV-2 antibody cocktail. *Science*. 2020 Aug 21;369(6506):1010-1014. doi: 10.1126/science.abd0827. Epub 2020 Jun 15. PMID: 32540901; PMCID: PMC7299284.
https://www.science.org/doi/full/10.1126/science.abd0827?rfr_dat=cr_pub++0pubmed&url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org
- Tan CY, Chiew CJ, Pang D, Lee VJ, Ong B, Wang LF, Ren EC, Lye DC, Tan KB. Effectiveness of bivalent mRNA vaccines against medically attended symptomatic SARS-CoV-2 infection and COVID-19-related hospital admission among SARS-CoV-2-naive and previously infected individuals: a retrospective cohort study. *Lancet Infect Dis*. 2023 Dec;23(12):1343-1348. doi: 10.1016/S1473-3099(23)00373-0. Epub 2023 Aug 2.
[https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(23\)00373-0/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(23)00373-0/fulltext)
- Wee LE, Tang N, Pang D, Chiew C, Yung CF, Chong CY, Lee V, Ong B, Lye DC, Tan KB. Effectiveness of Monovalent mRNA Vaccines Against Omicron XBB Infection in Singaporean Children Younger Than 5 Years. *JAMA Pediatr*. 2023 Dec 1;177(12):1324-1331. doi: 10.1001/jamapediatrics.2023.4505.
<https://jamanetwork.com/journals/jamapediatrics/article-abstract/2810492>
- Tan WC, Tan JYJ, Lim JSJ, Tan RYC, Lee ARYB, Leong FL, Lee SC, Chai LYA, Tan TT, Malek MIBA, Ong B, Lye DC, Chiew CJ, Chng WJ, Lim ST, Bharwani LD, Tan IB, Sundar R, Tan KB. COVID-19 Severity and Waning Immunity After up to 4 mRNA Vaccine Doses in 73 608 Patients With Cancer and 621 475 Matched Controls in Singapore: A Nationwide Cohort Study. *JAMA Oncol*. 2023 Sep 1;9(9):1221-1229. doi: 10.1001/jamaoncol.2023.2271. PMID: 37440245.
[COVID-19 Severity and Waning Immunity After up to 4 mRNA Vaccine Doses in 73 608 Patients With Cancer and 621 475 Matched Controls in Singapore - PMC \(nih.gov\)](https://pubmed.ncbi.nlm.nih.gov/40111111/)

Notable Research Awards & Grants from Past 5 Years

Name of Awards & Grants	Year Obtained
NMRC COVID-19 Research Fund A Multicenter, Adaptive, Randomized Blinded Controlled Trial of the Safety and Efficacy of Investigational Therapeutics for the Treatment of COVID-19 in Hospitalized Adults	2020
NMRC Clinical Trial Grant Investigator-Initiated Trials Early oral step-down versus continued intravenous antibiotic therapy for uncomplicated Gram-negative bacteraemia	2021
NMRC Clinician Scientist Individual Research Grant (CS-IRG) Gut microbiome recovery in patients with Gram-negative Bacteraemia receiving early oral stepdown antibiotic therapy versus prolonged/continued intravenous antibiotic therapy	2022
NMRC Clinician Scientist Individual Research Grant (CS-IRG) Quantifying the risk of gut microbiome disruption and disease due to antibiotic therapy by leveraging on the Singapore-led multicentre INVEST trial	2023

Translating Research Into Healthcare

2022:

- Which booster shot is more effective against Omicron? Published on 07 Jan 2022. <https://youtu.be/hSqB0WMIZ2k>
- Up close with Associate Professor David Lye. Published on 01 Feb 2022. <https://www.ntu.edu.sg/medicine/news-events/magazines-and-newsletters/the-lkcmedicine-february-2022/profile-up-close-with-associate-professor-david-lye>
- S'pore study finds mixing for Covid-19 booster jab more effective in fending off infection, severe disease. Published on 12 Feb 2022. <https://www.todayonline.com/singapore/spore-study-finds-mixing-covid-19-booster-jab-more-effective-fending-infection-severe-disease-1815381>
- "Data from 700,000 locals show mixed vaccination for booster more effective 本地 70 万人数据研究发现 混打追加剂 防疫力更佳" Published on 13 Feb 2022. *No url
- "Local study: Booster jab with another mRNA vaccine effective in reducing infection rates 追加剂打另一款 mRNA 疫苗 本地研究：能有效降低感染率". Published on 14 Feb 2022. <https://www.zaobao.com.sg/news/singapore/story20220214-1242384>
- COVID-19: Not wise to get virus to build immunity / Not time for an 'Omicron party', experts warn. Published on 22 Feb 2022. <https://www.straitstimes.com/singapore/health/it-is-not-the-time-to-have-a-covid-19-party-even-if-omicron-infections-are-milder>
- Evidence shows vaccination can help reduce symptoms of long COVID. Published on 22 Feb 2022. <https://www.straitstimes.com/singapore/health/askst-can-vaccination-reduce-symptoms-of-long-covid>

- "Experts: Most COVID-19 death cases were unvaccinated elderly with comorbidities' 部分因奥密克戎引发重症 专家：多数冠病死者 是未打疫苗患其他疾病长者 " Published on 22 Feb 2022. <https://www.zaobao.com.sg/news/singapore/story20220222-1245109>
- "Vaccine unable to fully eliminate effects, not time for 'party' yet 疫苗未能完全除去副作用 未是时候开派对" Published on 22 Feb 2022. *No url
- Severe symptoms more likely in those who took Sinovac jab. Published on 14 Apr 2022. <https://www.straitstimes.com/singapore/health/severe-covid-19-symptoms-5-times-more-likely-in-those-infected-who-got-sinovac-vaccine-than-pfizer-one-study>
- Pfizer gives extra protection than Sinovac. Published on 14 Apr 2022. *No url
- Severe Covid-19 symptoms 5 times more likely in patients who got Sinovac rather than Pfizer jab: Study. Published on 14 Apr 2022. <https://tnp.straitstimes.com/lifestyle/health/severe-covid-19-symptoms-5-times-more-likely-patients-who-got-sinovac-rather-pfizer>
- "Local study: Compared with mRNA vaccines, those who received Sinovac vaccine stand five times higher chances of developing severe symptoms after contracting COVID-19 本地研究：施打科兴者染冠病 重症风险高 5 倍". Published on 14 Apr 2022. *No url
- Clinical trials evolving as they advance treatment. Published on 23 May 2022. <https://www.straitstimes.com/singapore/spore-sets-sights-on-being-regional-centre-for-clinical-trials-from-diabetes-to-cancer>
- Local study shows unvaccinated individuals have the lowest antibody against new virus strain even if they had been infected by BA.1 or BA.2 before 本地研究：未接种 即使染过 BA.1 或 BA.2 对新毒株抗体量最。 Published on 16 Aug 2022. *No url

2021:

- 8World FB Live "Singapore Close-up". Published 07 Jan 2021. https://www.facebook.com/watch/live/?v=538704967134563&ref=watch_permalink
- COVID-19 vaccine is safe and efficacious for seniors. 冠病疫苗对老年人安全有效. Published 25 Jan 2021. <https://www.zaobao.com.sg/forum/views/talk/story20210125-1119016>
- Covid antibodies may last from days to years, depending on infection severity: study. Published on 24 Mar 2021. <https://www.livemint.com/science/health/covid-antibodies-may-last-from-days-to-years-depending-on-infection-severity-study-11616571580902.html>
- COVID-19 survivors' immunity could last DECADES for some – but it only last days for others and 11% never develop ANY protection from reinfection, study suggests. Published on 23 Mar 2021. <https://www.livemint.com/science/health/covid-antibodies-may-last-from-days-to-years-depending-on-infection-severity-study-11616571580902.html>

- <https://www.dailymail.co.uk/health/article-9394875/Coronavirus-immunity-DECADES-people-days-others.html> >
- <https://uk.newschant.com/health/coronavirus-immunity-could-last-decades-for-some-people-but-only-days-for-others/>
- Covid-19: Antibodies may last from days to years, depending on infection severity, says. Published on 24 Mar 2021. <https://health.economictimes.indiatimes.com/news/industry/covid-19-antibodies-may-last-from-days-to-years-depending-on-infection-severity-says-study/81667589>
- Annual vaccination could be necessary to prevent future Covid-19 outbreaks, S'pore study finds. Published on 24 Mar 2021.
 - <https://www.todayonline.com/singapore/annual-vaccination-could-be-necessary-prevent-future-covid-19-outbreaks-spore-study-finds>
 - <https://www.malaymail.com/news/singapore/2021/03/25/annual-vaccination-could-be-necessary-to-prevent-future-covid-19-outbreaks/1960828>
- Study shows SARS-CoV-2 antibodies wane at different rates. Published on 24 Mar 2021. <https://www.azolifesciences.com/news/20210324/Study-shows-SARS-CoV-2-antibodies-wane-at-different-rates.aspx>
- Coronavirus Immunity May Last For Days Or Even For Decades In People: Study. Published on 24 Mar 2021. <https://www.republicworld.com/lifestyle/health/coronavirus-immunity-may-last-for-days-or-even-for-decades-in-people-study.html>
- Study Shows What It Depends On. Published on 24 Mar 2021.
 - <https://www.thespuzz.com/study-shows-what-it-depends-on/?amp=1>
 - <https://www.uniquenews.org/world/study-shows-what-it-depends-on/>
 - <http://worldnewslive.in/study-shows-what-it-depends-on/>
- Individual SARS-CoV-2 neutralizing antibody immunity lasts from days to decades. Published from 24 Mar 2021.
 - <https://myhealthguru.com/individual-sars-cov-2-neutralizing-antibody-immunity-lasts-from-days-to-decades/>
 - <https://www.ibtimes.com/individual-covid-19-antibodies-could-last-days-decades-scientists-find3168292>
 - <https://sluggio.com/covid-19-antibodies-may-last-from-days-to-years-depending-on-infection-severity-says-study>
 - <https://indianews-online.com/2021/03/24/antibodies-may-last-from-days-to-years-depending-on-infection-severity-says-study-the-new-indian-express/>
 - <https://techbeezer.com/singapore/individual-sars-cov-2-neutralizing-antibody-immunity-lasts-from-days-to-decades/>
 - <https://www.dailynewscatch.com/2021/03/24/covid-19-antibodies-can-last-from-days-to-years-study-shows-what-it-depends-on/amp/>
 - <https://uazmi.com/news/post/hiXzsetln79KMLCBRFKtR4>
 - <https://www.news24x7live.in/covid-19-antibodies-may-last-from-days-to-years-depending-on-infection-severity-says-study/>
 - <https://royalreviewspro.com/index.php/2021/03/24/covid-19-antibodies-might-ultimate-from-days-to-years-learn-about-displays-what-it-relies-on/>

- <https://sunrisetechno.com/covid-19-antibodies-might-final-from-days-to-years-research-exhibits-what-it-relies-upon-on/>
- <https://healthcare-in-europe.com/en/news/covid-19-immunity-may-last-from-days-to-decades.html>
- <https://theprint.in/health/covid-antibodies-may-last-from-days-to-years-depending-on-infection-severity-says-study/628258/?amp>
- Discover that antibodies decrease at a different rate. Published on 24 Mar 2021. <https://m.time24.news/2021/03/discover-that-antibodies-decrease-at-a-different-rate.html>
- Coronavirus Neutralizing Antibody Immunity May Last from Days to Decades, Finds Study. Published on 24 Mar 2021. <https://www.myhealthyclick.com/coronavirus-neutralizing-antibody-immunity-may-last-from-days-to-decades-finds-study/>
- Learn about presentations what it relies on. Published on 24 Mar 2021.
 - <https://www.beeion.com/learn-about-presentations-what-it-relies-on/Covid-19: Antibodies may last from days to years, depending on infection severity, says.> Published on 24 Mar 2021.
 - https://newsrush.in/news/covid-19-antibodies-may-last-from-days-to-years-depending-on-infection-severity-says-study-india-news/?utm_source=rss&utm_medium=rss&utm_campaign=covid-19-antibodies-may-last-from-days-to-years-depending-on-infection-severity-says-study-india-news
 - <https://newsdrove.com/?p=149122>
- Immunity to COVID-19 varies greatly among those infected, Singapore scientists discover. Published on 25 Mar 2021. <https://www.thestar.com.my/aseanplus/aseanplus-news/2021/03/25/immunity-to-covid-19-varies-greatly-among-those-infected-singapore-scientists-discover>
- Annual vaccination could be necessary to prevent future COVID-19 outbreaks, Singapore study finds. Published on 25 Mar 2021. <https://theworldnews.net/my-news/annual-vaccination-could-be-necessary-to-prevent-future-covid-19-outbreaks-singapore-study-finds>
- S'pore study shows length of immunity varies greatly. Published on 26 Mar 2021. <https://www.straitstimes.com/singapore/health/spore-study-shows-length-of-immunity-varies-greatly>
- Researchers from Duke-NUS Medical School, NCID reveals antibodies against SARS-CoV-2 disappear at changed rates. Published on 31 Mar 2021. <http://www.timestechpharma.com/pharmaceutical/researchers-from-duke-nus-medical-school-ncid-reveal-antibodies-against-sars-cov-2-disappear-at-changed-rates/>
- Benefits of Covid-19 vaccination outweigh the risks. Published on 02 Mar 2021. <https://www.straitstimes.com/opinion/forum/forum-benefits-of-covid-19-vaccination-outweigh-the-risks>
- Early Reports of U.K. Variant's Lethality Appear Greatly Exaggerated. Published on <https://www.medpagetoday.com/infectiousdisease/covid19/92057/>

- B.1.1.7 variant not linked to more serious infections: study. Published on <https://www.ctvnews.ca/health/coronavirus/b-1-1-7-variant-not-linked-to-more-serious-infections-study-1.5385026?autoplay=true>
- Kent coronavirus variant does not cause more severe disease, studies show. Published on <https://www.ft.com/content/e113edb5-2b6c-4322-919a-832d636e4e95> / by Clive Cookson
- UK COVID variant not linked to more serious infections: Study. Published on 12 Apr 2021.
 - <https://www.moneycontrol.com/news/world/uk-covid-variant-not-linked-to-more-serious-infections-study-6762141.html>
 - <https://www.japantimes.co.jp/news/2021/04/13/world/uk-coronavirus-variant>
 - <https://manilastandard.net/mobile/article/351713>
 - <https://www.bangkokpost.com/world/2099175/uk-variant-not-linked-to-more-serious-infections-the-lancet>
 - <https://sg.news.yahoo.com/english-variant-not-linked-more-223004574.html>
 - <https://health.economictimes.indiatimes.com/news/industry/english-variant-not-linked-to-more-serious-infections-study/82045164>
 - <https://www.cnbcindonesia.com/tech/20210413112930-37-237419/riset-variant-corona-b117-lebih-mudah-menular-tapi>
 - <https://www.cnnindonesia.com/teknologi/20210413120211-199-629189/studi-baru-kontradiktif-variant-inggris-tak-perparah-covid-19>
 - <https://www.msn.com/en-in/news/world/uk-coronavirus-variant-not-linked-to-more-serious-infections-study/amp/ar-BB1fALQw>
 - <https://scitechdaily.com/covid-variant-b117-is-more-transmissible-but-does-not-increase-severity-of-symptoms/>
 - <https://www.khaleejtimes.com/coronavirus-pandemic/covid-19-english-variant-wont-lead-to-serious-infections-new-study-says>
 - <https://www.healthcarehygienemagazine.com/b-1-1-7-variant-more-transmissible-does-not-increase-severity-studies-suggest/>
- Form your own social bubble and stick to it, says NCID director. Published on 17 May 2021. <https://www.straitstimes.com/singapore/health/form-your-own-social-bubble-and-stick-to-it-to-keep-your-family-safe-from-covid-19>
- COVID situation likely more dangerous than before: Expert. Published on 18 May 2021.
 - <https://www.tnp.sg/news/singapore/covid-situation-here-could-be-more-dangerous-last-year-expert>
 - <https://www.todayonline.com/singapore/ncid-director-warns-covid-19-situation-likely-more-dangerous-urges-public-go-beyond>
 - <https://www.mediaportal.com/mp/playnow.aspx?u=150704&p=1779215035&key=90971356024484501392169721922923313276238>
- The B1617 Variant: How Worried Should We Be? Published on 03 Jun 2021. <https://www.channelnewsasia.com/news/video-on-demand/talking-point-fy2122/the-b1617-variant-how-worried-should-we-be-14940106>
- Singapore's expert panel on Covid-19 vaccination continues to recommend Pfizer, Moderna. Published on 07 Jun 2021. <https://www.straitstimes.com/singapore/health/singapores-expert-panel-on-covid-19-vaccination-continues-to-recommend-pfizer>

- COVID-19 expert committee says mRNA vaccines safe and effective against variants; rebukes claims of some doctors. Published on 07 Jun 2021. <https://www.todayonline.com/singapore/covid-19-expert-committee-says-mrna-vaccines-safe-and-effective-against-variants-rebuts-claims-doctors>
- 'Hardly any data' on Sinovac's potency against COVID-19 variants, unlike mRNA vaccines which are proven effective: NCID director. Published on 07 Jun 2021. <https://www.todayonline.com/singapore/covid-19-expert-committee-says-mrna-vaccines-safe-and-effective-against-variants-rebuts-claims-doctors>
- Infectious diseases expert David Lye calls out misinformation about Covid-19 vaccines. Published on 07 Jun 2021.
 - <https://www.straitstimes.com/singapore/health/infectious-diseases-expert-david-lye-calls-out-misinformation-about-covid-19>
 - <https://www.beritaharian.sg/setempat/pakar-penyakit-berjangkit-bersuara-tentang-maklumat-salah-mengenai-vaksin-covid-19>
- Expert panel: Pfizer and Moderna vaccines still effective against mutant strains 驳斥社媒有关 mRNA 疫苗不实信息 专家团：辉瑞莫德纳对变种毒株仍有效" Published on 08 Jun 2021. <https://www.zaobao.com.sg/news/singapore/story20210608-1153257>
- Professional healthcare workers should not spread yet-to-confirm and unscientific. '专业医疗人员不应散播未经证实和不科学信息'" Published on 08 Jun 2021. *No url
- "HSA still waiting for Sinovac to submit data compliant to safety standard 卫生科学局仍在等科兴 提交符合标准安全数据" Published on 08 Jun 2021. *No url
- Old is not always gold, and other drug safety myths. Published on 09 Jun 2021. <https://www.straitstimes.com/opinion/old-is-not-always-gold-and-other-drug-safety-myths>
- "Editor's word 站长的话". Published on 09 Jun 2021. *No url
- "Editorial: Beware of side effects of 'vaccine hesitancy'. 警惕“疫苗怀疑论”的副作用" Published on 10 Jun 2021. <https://www.zaobao.com.sg/forum/editorial/story20210610-1154201>
- The Big Read: Conspiracy theories, scientific misinterpretations, plain ignorance abound in Covid-19 infodemic. Published on 12 Jun 2021.
 - <https://www.todayonline.com/big-read/big-read-conspiracy-theories-scientific-misinterpretations-plain-ignorance-abound-covid-19>
 - <https://www.todayonline.com/big-read/big-read-short-covid-19-info-war-its-not-just-virus-wreaking-havoc>
- True or not? Increasingly tough to get through minefield of Covid-19 misinformation. Published on 17 Jun 2021. <https://www.straitstimes.com/singapore/true-or-not-increasingly-tough-to-get-through-minefield-of-covid-19-misinformation>

- Sifting out truths from untruths: Stop, think and check before hitting 'send' button. Published on 21 Jun 2021. <https://www.straitstimes.com/singapore/sifting-out-truths-from-untruths-stop-think-and-check-before-hitting-send-button>
- MOH, NCID expert counter claims by doctors on need to halt COVID-19 jabs for schoolboys. Published on 28 Jun 2021. <https://www.straitstimes.com/singapore/moh-ncid-expert-counter-claims-by-doctors-on-need-to-halt-covid-19-jabs-for-schoolboys>
- Benefits of mRNA Covid-19 vaccines outweigh risk of vaccination, say experts in response to letter from doctors. Published on 28 Jun 2021. <https://www.todayonline.com/singapore/benefits-mrna-covid-19-vaccines-outweigh-risk-vaccination-say-experts-response-letter>
- Infectious diseases expert slams open letter by 5 doctors for 'misleading' public on Covid-19 vaccines for youth. Published on 28 Jun 2021. <https://www.todayonline.com/singapore/infectious-diseases-expert-slams-open-letter-five-doctors-misleading-public-covid-19>
- The Big Story: S'pore expert refutes doctors' claims on need to halt Covid-19 vaccination for youths. Published on 28 Jun 2021. <https://www.straitstimes.com/multimedia/the-big-story-spore-expert-refutes-doctors-claims-on-need-to-halt-covid-19-vaccination>
- MOH counters claims by docs urging delay in jabs for young. Published on 29 Jun 2021. <https://www.straitstimes.com/singapore/moh-counters-claims-by-docs-urging-delay-in-jabs-for-young>
MOH responds to call to delay Covid-19 jabs for schoolboys, says benefits outweigh risk. Published on 29 Jun 2021. <https://www.straitstimes.com/singapore/singapore-will-monitor-health-data-says-moh-in-response-to-calls-to-halt-covid-19-jabs-for>
- Danger of getting Covid-19 outweighs vaccination risk. Published on 29 Jun 2021. <https://www.tnp.sg/news/singapore/moh-counters-claims-group-doctors-urging-delay-jabs-young>
- "Expert panel responds to call to delay COVID-19 jabs for schoolboys, says benefits outweigh risk 回应医生吁“暂停为男学生接种”公开信 专家团：染病风险远大于接种疫苗风险" published on 29 Jun 2021. <https://www.zaobao.com.sg/news/singapore/story20210629-1162138>
- "MOH, infectious disease specialist concerned over unilateral allegations by doctors urging COVID-19 vaccine for youths to be stopped. Published on 29 Jun 2021. <https://www.beritaharian.sg/setempat/moh-pakar-sakit-berjangkit-prihatin-dakwaan-sepihak-doktor-yang-gesa-vaksin-covid-19-bagi>
- MOH, NCID expert counter claims by doctors on need to halt Covid-19 jabs for schoolboys. Published on 29 Jun 2021. *No url
- Moving from Covid-19 pandemic to endemic: Singapore's strategy and how it can unfold. Published on 03 Jul 2021. <https://www.straitstimes.com/singapore/health/moving-from-covid-19-pandemic-to-endemic>
- More options for severe COVID-19 treatment. Published on 09 Jul 2021. <https://www.straitstimes.com/singapore/more-options-for-severe-covid-19-treatment>
- Up Close With... Associate Professor David Lye, infectious disease expert. Published on 11 Jul 2021. <https://www.todayonline.com/voices/close-associate-professor-david-lye-infectious-disease-expert>

- 9 Questions with an Infectious Disease Expert. Published on 09 sep 2021. <https://www.fitnessfirst.com.sg/blog/9-questions-with-an-infectious-disease-expert>
- COVID-19 vaccinations: Should they be made mandatory? Published on 16 Sep 2021.
 - <https://www.channelnewsasia.com/listen/heart-matter/covid-19-vaccinations-should-they-be-made-mandatory-2182431>
 - <https://www.facebook.com/ChannelNewsAsia/posts/10158529257752934>
 - <https://www.linkedin.com/feed/update/urn:li:activity:6844194447429902336>
- Frustration with those who refuse COVID-19 vaccination but making it compulsory is tricky: Infectious diseases experts. Published on 18 Sep 2021.
 - <https://www.channelnewsasia.com/singapore/covid-19-vaccine-mandatory-safe-moh-approve-booster-2184751>
 - <https://www.facebook.com/ChannelNewsAsia/posts/10158531931487934>
 - <https://twitter.com/ChannelNewsAsia/status/1438991793396224001>
- Experts caution against relaxing mask-wearing rules outdoors. Published on 24 Sep 2021. <https://www.straitstimes.com/singapore/health/is-it-time-to-ease-outdoor-mask-rules-not-yet-say-experts-on-wp-mp-jamus-lims>
- Convincing the doubters: Why some younger people are reluctant to get the COVID-19 vaccine. Published on 13 Oct 2021. <https://www.channelnewsasia.com/singapore/unvaccinated-new-rules-malls-hawker-centres-covid-19-vaccine-2235856>
- " 奧米克戎究竟是什么？(What is Omicron exactly about?)" Published on 14 Dec 2021. <https://www.facebook.com/963haofm/videos/447507583450807/>
- CNA938 Live Radio Interview with A/Prof David Lye on NCID-MOH Joint Study. Published on 24 Dec 2021. *no url
- New comparative study by Duke-NUS and NCID provides insight on the rise of Omicron. Published on 10 Oct 2022.
 - <https://www.asiaresearchnews.com/content/new-comparative-study-duke-nus-and-ncid-provides-insight-rise-omicron>
 - <https://www.medicineworldcouncil.com/health-news/new-comparative-study-provides-insight-on-the-rise-of-omicron/>
 - <https://www.medicalxpress.com/news/2022-10-insight-omicron.html#lightbox>
- "Study on contagious nature of Omicron variant ஓமிக்ரான் தொற்றும் விதம் ஆய்வு". Published on 12 oct 2022. *No url
- COVID-19 boosters provide better immunity against SARS-CoV-2 variants in elderly Singaporeans. Published on 12 oct 2022. [medicalxpress.com/news/2022-10-covid-boosters-immunity-sars-cov-variants.html](https://www.medicalxpress.com/news/2022-10-covid-boosters-immunity-sars-cov-variants.html)
- "本地研究：更能躲开抗体造成感染 奥密克戎毒株让接种人群更好与冠病共存 (Omicron strain allows vaccinated populations to better coexist with COVID-19)" Published on 13 Oct 2022. *No url
- Contagious nature of Omicron variant helped societies transition to living with Covid-19: Study. Published on 13 Oct 2022. [straitstimes.com/singapore/contagious-nature-of-omicron-variant-helped-societies-transition-to-living-with-covid-19-study](https://www.straitstimes.com/singapore/contagious-nature-of-omicron-variant-helped-societies-transition-to-living-with-covid-19-study)

- "与其他变异毒株相比 - 奥密克戎更能躲避免疫反应 (Compared to other mutated variant, Omicron better evade immune response)" Published on 13 Oct 2022. *No url

Health Impacts (CY2022 Publications)

- 1) Virological and serological kinetics of SARS-CoV-2 Delta variant vaccine breakthrough infections: a multicentre cohort study
 - a) Paper was cited as part of the scientific opinion analysis by European Food Safety Authority (EFSA) tasked by European Centre for Disease Prevention and Control (An agency of the European Union). EFSA was asked to review the scientific literature related to animal species susceptible to SARS-CoV-2 infection that play a role in its epidemiology. An assessment of the current epidemiological situation and of the risk for human and animal health posed by SARS-CoV-2 infection in animal species of concern was also conducted, which should serve to recommend options for reviewing the monitoring strategies for SARS-CoV-2 infection in animal species of concern.
 - b) Paper was cited as a working paper under Finnish Institute for Health and Welfare (THL, Finnish: Terveystieteiden ja hyvinvoinnin laitos as part of an analysis to study the maintenance of vaccine protection against corona infection and severe coronavirus disease as well as the protection of people in risk groups aged over 70 and aged 16-69 against corona infection after the second vaccine dose and against the coronavirus disease requiring outpatient treatment in Finland THL is the biggest expert organisation under the ministry and its most important source of consultation regarding scientific knowledge.
 - c) Paper was cited by the French Society of Hospital Hygiene (SF2H) on the protection of patients and professionals in the context of COVID-19 where the members of the Scientific Council of the SF2H proposed a set of useful measures for the protection of patients and professionals in health and medico-social establishments. These measures must be adapted to the particulars of the establishments and to the local situation of the epidemic. (Note: source is from Google Scholar)

The SF2H society is composed of professionals working in the field of hygiene promotion in health care, to promote safety and quality of care, epidemiology, prevention and the fight against healthcare associated infections including nosocomial infections; safety and health awareness, evaluation, accreditation and risk management in the field of healthcare associated infections.

Policy citation link (Plum X Metrix): https://plu.mx/plum/a/policy_citation?doi=10.1016/j.cmi.2021.11.010

- 2) Clinical and virological features of SARS-CoV-2 variants of concern: a retrospective cohort study comparing B.1.1.7 (Alpha), B.1.315 (Beta), and B.1.617.2 (Delta)
 - a) Paper was cited by **World Health Organisation (WHO)** as part of COVID-19 Weekly Epidemiological Update to the public on COVID-19. WHO has based on the papers published to focus on SARS-CoV-2 Variants of Interest and Variants of Concern. Recommendation to prevent the spread of COVID-19 pertaining to the new VOCs were then provided based on that. WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact vaccine, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. Systems have been established to detect signals of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) and assess these based on the risk posed to global public health. As these risks

evolve, WHO updates the list of global VOIs and VOCs (Table 2) to support setting priorities for surveillance and research, and ultimately guide response strategies.

- b) Paper was cited in the COVID-19 Science Brief of **CDC**. COVID-19 Science Briefs provide a summary of the scientific evidence used to inform specific CDC guidance and recommendations. The Science Briefs reflect the scientific evidence, and CDC's understanding of it, on a specific topic at the time of the Brief's publication. 1) All COVID-19 vaccines currently approved or authorized in the United States 2) Available evidence suggests the currently approved or authorized COVID-19 vaccines are highly effective against hospitalization and death for a variety of strains 3) Limited available data suggest lower vaccine effectiveness against COVID-19 illness and hospitalization among immunocompromised people 4) The risk for SARS-CoV-2 infection in fully vaccinated people cannot be completely eliminated as long as there is continued community transmission of the virus.

Policy citation link (Plum X Metrix): https://plu.mx/plum/a/policy_citation?doi=10.1093/cid/ciab721

- 3) Monkeypox: disease epidemiology, host immunity and clinical intervention

- a) Paper was cited by **Australia Government** as part of **Communicable Diseases Network Australia (CDNA) National Guidelines for Public Health Unit**.

Policy citation link (Plum X Metrix): https://plu.mx/plum/a/policy_citation?doi=10.1038/s41577-022-00775-4

- 4) Effectiveness of a Fourth Dose of COVID-19 mRNA Vaccine Against Omicron Variant Among Elderly People in Singapore

- a) Paper is cited as part of **Public Health Scotland COVID-19 Statistical Report**, a **A Management Information release for the public. This report summarises the current COVID-19 data in Scotland, presenting statistics on estimated infection levels from the ONS COVID Infection Survey, which is currently our best understanding of community population prevalence. The report also presents data on wastewater infection levels, reproduction (R) number, reported COVID-19 cases, COVID-19 hospital and ICU admissions and COVID-19 vaccine effectiveness.** Published management information are non-official statistics which may be in the process of being transitioned into official statistics.

Public Health Scotland is Scotland's national agency for improving and protecting the health and wellbeing of Scotland's people.

Plum X Metrix Link: https://plu.mx/plum/a/policy_citation?doi=10.7326/M22-2042

- 5) Association of Homologous and Heterologous Vaccine Boosters With COVID-19 Incidence and Severity in Singapore

- a) Paper was cited by the **Federal office of public health (FOPH) and Federal Commission for Vaccinations (CFV), Switzerland** as part of the vaccination recommendation against COVID-19 for Spring/Summer 2023. The analysis concluded by FOPH and the CFV based on the scientific papers that there will not be any recommendations for vaccination against COVID-19 for spring/summer 2023 given the expected low circulation of the virus and the high level

of immunity in the population.

The Federal Office of Public Health (FOPH) is part of the Federal Department of Home Affairs. Along with the cantons it is responsible for public health in Switzerland and for developing national health policy.

The CFV acts as an advisory order to the Federal Council, the Federal Department of the Interior (DFI) and the Federal Office for Public Health (FOSP) for all questions related to vaccination. It is independent of industry.

The CFV is a commission of the Confederation made up of independent experts who play an important role of mediator between the authorities, the specialized circles and the population with regard to vaccination. Its mandate is to scientifically advise the authorities during the development of recommendations in this area.

Plum X Metrix Link: https://plu.mx/plum/a/policy_citation?doi=10.1001%2Fjama.2022.1922

Collaborator Role

6) Efficacy and safety of two neutralising monoclonal antibody therapies, sotrovimab and BRII-196 plus BRII-198, for adults hospitalised with COVID-19 (TICO): a randomised controlled trial

a) Paper is cited as a guideline by **World Health Organisation (WHO)** for Therapeutics and COVID-19.

This living guideline from the World Health Organization (WHO) incorporates new evidence to dynamically update recommendations for COVID-19 therapeutics.

Policy citation link (Plum X Metrix): [https://plu.mx/plum/a/policy_citation?doi=10.1016/S1473-3099\(21\)00751-9](https://plu.mx/plum/a/policy_citation?doi=10.1016/S1473-3099(21)00751-9)