The Honorable Danielle Smith Premier of Alberta The Office of the Premier 307 Legislature Building 10800 - 97 Avenue Edmonton, AB T5K 2B6

The Honorable Adriana LaGrange Minister of Health Office of the Minister, Health 423 Legislature Building 10800 - 97 Avenue Edmonton, AB T5K 2B6

Members of the Legislative Assembly of Alberta 9820 - 107 Street, NW Edmonton, Alberta T5K 1E7

Wednesday, January 29, 2025

Re: Request to dismiss the Alberta COVID-19 Pandemic Data Review Task Force report

Dear Premier, Minister of Health, and members of the Legislative Assembly of Alberta,

We collectively request that the "Alberta's COVID-19 Pandemic Response" report by the Alberta COVID-19 Pandemic Data Review Task Force be officially dismissed for use as a source of information for both public and provincial policy, as it inaccurately reflects the body of scientific evidence.

We, the undersigned researchers and academic physicians with extensive expertise across fields such as infectious diseases, pediatrics, virology, vaccinology, immunology, respirology and pulmonary pharmacology, public health, clinical epidemiology, and emergency medicine, strongly disagree with many of the conclusions in this report. We are compelled to present a more accurate representation of the scientific evidence.

To focus on just a few examples for brevity:

Contrary to the report's conclusions, a large amount of evidence is available about the benefits and risks associated with COVID-19 vaccines, and the evidence strongly favours vaccination as a preventative measure.

The report's conclusions misrepresent the large body of knowledge about vaccine risks, and benefit-to-risk ratios. Statements such as "Task Force recommends halting the use of COVID-19 vaccines without full disclosure of their potential risks" mischaracterizes the extensive scientific knowledge on vaccine benefits, safety, and the routine practice of full disclosure provided prior to vaccine administration. Moreover, the report does not reflect or consider the current guidance or position statements of national bodies such as the Canadian Paediatric Society, the Society of Obstetricians, the Association of Medical Microbiology and Infectious Disease Canada, the National Advisory Committee on Immunization, among others.

<u>Benefits of vaccines:</u> Vaccines remain our best defense against SARS-CoV-2 (the virus that causes COVID-19) and other infectious pathogens. The overwhelming body of scientific evidence supports the effectiveness of vaccines in preventing severe disease, hospitalization, death, the development of long COVID, and in children

they protect against the development of the multisystem inflammatory syndrome in children with COVID-19¹⁻⁶. Evidence also suggests additional benefits such as improved pregnancy outcomes⁷, reduction in cardiovascular events⁸ and significant savings to the healthcare systems^{9, 10}.

Risks of vaccines: The potential risks of vaccines are tracked, analyzed and disclosed. The scientific evidence shows that COVID-19 vaccines are safe, with a much lower risk of complications than with SARS-CoV-2 infection¹¹⁻¹³. As with most vaccines, side effects like pain at the injection site, fatigue, headache, muscle and joint pains are common (occur in >1-10% of people); such events are mild and resolve within a few days. Serious adverse events, such as myocarditis (heart inflammation) are very rare (occurring in <1 per 10,000 or <0.01% of vaccinated people)¹⁴. Overall, incorporating the risk of adverse events, balanced against the benefits, unequivocally supports recommending vaccination for high-risk individuals and offering it widely to standard risk people. COVID-19 vaccines are estimated to have saved millions of lives worldwide^{15, 16}.

<u>Halting vaccines is not recommended:</u> Currently, vaccination for influenza, SARS-CoV-2 and other vaccine preventable diseases, remains a personal choice in Alberta. By halting vaccines and inaccurately demoting the evidence-based benefits of vaccination, choice is removed from those who want to be vaccinated and for whom their underlying health conditions would render an even greater benefit from vaccination. Impeding access to vaccination contradicts the report's support for personal choice, while preventing access to potentially life-saving vaccines. Such actions violate the principles of public health, endangering Albertans and risking further burden to our healthcare system.

Contrary to the report's conclusions, the body of scientific evidence does not support therapies like ivermectin.

We disagree with the report's misrepresentation of information on COVID-19 therapies such as ivermectin, and the stated conclusion that "Studies show promising results for ivermectin in terms of viral clearance and reduced hospitalization and death rates". There is now a large and diverse body of evidence, including numerous clinical trials, that have consistently shown that it is <u>not</u> an effective treatment for COVID-19, and that it is associated with potentially harmful side effects¹⁷⁻¹⁹. A number of international scientific, professional, and regulatory bodies do not support ivermectin for use as a therapy for COVID-19²⁰⁻²². No major regulatory agency has approved ivermectin for treatment of COVID-19, and some, like the Public Health Agency of Canada and the US Food and Drug Administration, have issued warnings about its safety. Many studies that supported ivermectin for COVID-19 have been retracted²³, with some reporting unreliable or fraudulent data²⁴⁻²⁶. The promotion of unproven treatments can be dangerous and misleading to the public and can result in poor and costly health policy²⁷.

We advocate for comprehensive and accurate evaluations in public health reporting

The report appears influenced by a limited perspective that emphasizes concerns over vaccines and favours treatments like ivermectin; a stance that does not reflect the broader scientific knowledge required for a comprehensive provincial health report. COVID-19 vaccines are among the most thoroughly researched and continuously monitored medical interventions in history. Based on the body of scientific knowledge, organizations such as Health Canada, the Public Health Agency of Canada, the Alberta Medical Association, the National Advisory Committee on Immunization, the US Centers for Disease Control and Prevention, and other global health authorities consistently affirm their safety and efficacy^{1, 13, 14, 28}. The Canadian Immunization Guide, based on contributions from a wide range of experts, provides a critically evaluated and comprehensive resource on vaccines in Canada. Moreover, there is broad support for COVID vaccines by the medical community. The Clarity Foundation's survey of 135 recognized infectious disease and critical care specialists found widespread agreement on the safety and effectiveness of COVID vaccines, with 99 percent supporting their use²⁹. Conversely, the report is selective in its presentation and inclusion of data and thus the report does not provide the full context needed to understand the complexity of vaccine safety and efficacy.

Beyond the selection and misrepresentation of the data presented, numerous passages in the report appear to be directly copied from other, pre-existing documents. Some of references included in the vaccine section are absent, instead simply listed as "TBD" suggesting the references would be added later to support the narrative. Moreover, the credentials of several authors/contributors are incorrect, exaggerating the expertise and recognition of some individuals. Critically, the report also included some consultants that did not agree with the report's conclusions, nor provided consent for using their names; this produced a false sense of credibility. These quality issues call the report as a whole into question.

Overall, we advocate for science-based policy and public health integrity in Alberta

In summary, we strongly advocate for use of the most current and representative scientific knowledge and best practices when developing reports to inform the public and guide policy development. While ongoing research continues to refine and enhance available options, improve benefit-to-risk ratios, and boost health outcomes, it is essential that policies are founded on ongoing robust and well-established scientific evidence, rather than misrepresented data. In light of the wealth of concerns related to the report, we recommend that the Government of Alberta officially dismiss the report, as it inaccurately represents the scientific data as a whole. Instead, policy decisions should be grounded in the extensive evidence supporting vaccine safety and efficacy and the insights from the broader scientific and medical community.

We are committed to offering evidence-based insights to support informed decision-making. We are deeply invested in the health and well-being of our fellow Albertans and passionate about helping our communities. We are dedicated to ensuring the best outcomes for our entire population.

Sincerely (in random order),

Professor Timothy Caulfield, Faculty of Law and School of Public Health, University of Alberta	David J. Marchant, PhD Professor, Virology	Dr. Craig Jenne, PhD Scientist, Professor of Immunology, Expertise in Vaccines and Viral Infection
Vanessa Meier-Stephenson, MD PhD FRCPC, Infectious Diseases Specialist, clinician scientist, expertise in viral hepatitis.	Dr. Tom Hobman, Professor, Expertise in Virology	Dr. Cora Constantinescu, MD, FRCPC, MSc Pediatrics Infectious Diseases Specialist. Clinical Associate Professor, Cumming School of Medicine, Calgary. Expertise in vaccines, vaccine safety and infectious diseases
Matthew Macauley, PhD Scientist, Expertise in Antibodies	Dr. Mark Giembycz, PhD, FBPharmS, Professor. Expertise in Pulmonary Pharmacology	Dr. James D. Kellner MD, FRCPC, Pediatrics Infectious Diseases Specialist. Professor of Pediatrics, Calgary. Expertise in vaccines and clinical epidemiology.
Dr. Troy Baldwin, Ph.D Scientist, Expertise in T cell responses	Dr. Kevin Kane, PhD Scientist, Professor of Immunology, expertise in immune responses in lung to viruses	Dr. Karina Top, MD, MS, FRCPC, Pediatric Infectious Disease Specialist, Professor of Pediatrics, Edmonton. Expertise in vaccines and infectious diseases
Dr. Ryan Noyce, Ph.D	Dr. Maya Shmulevitz, PhD	Dr. Stephanie Yanow, PhD Scientist, Expertise in infectious diseases

Scientist, Expertise in virology,	Scientist, Professor, Virology	
vaccines	Expertise	
Dr. Duane Bratt, political scientist, who is completing a book on the politics of COVID in Alberta	Dr. Katharine Magor, PhD Scientist, Expertise in influenza virology	Dr. Frank van der Meer, DVM PhD Professor Global Health and Infectious Diseases Virology.
Dr. Bonita Lee, MD, FRCP(C) Infectious Disease Specialist	Dr. Chris Mody, MD, FRCPC, Professor of Respirology and Immunology	Dr. David Brindley, PhD, DSc, FRSC. Professor of Biochemistry.
Dr. Joan L. Robinson, MD, FRCP(C) Pediatric Infectious Disease Physician, Stollery Children's Hospital	Dr. Alain Tremblay, MDCM, FRFPC, FCCP. Professor of Medicine. Specialist in Respiratory Medicine. Expertise in COVID-19 Clinical trials.	Dr. Shazma Mithani, MD, FRCPC Associate Clinical Professor Department of Emergency Medicine University of Alberta
Dr. Carla S. Coffin, MD, MSc, FRCP(C), FAASLD, Professor of Medicine and Clinician Scientist Researcher in Viral Hepatitis	Dr. Mary Hitt, PhD Scientist, Expertise in Virology	Dr. David Evans, Ph.D. Professor emeritus, expertise in viruses, virus disease and transmission, vaccines, biosecurity
Dr. Sabine Gilch, PhD, Professor and Scientist, specializing in Infectious Disease Research	Dr. Hermann Schätzl, MD/PhD, Professor and board-certified medical virologist, former Professor of Clinical Virology, textbook author "Molecular Virology"	Dr. Alena Tse-Chang, MD FRCPC Pediatric Infectious Diseases Specialist, Associate Professor of Pediatrics, Edmonton.
Dr. Otto Vanderkooi, MD, FRCP(C), DTMH Specialist in Pediatrics, Pediatric Infectious Diseases, Medical Microbiology & Tropical Medicine. Expertise in Pediatric Infectious Diseases, Vaccinology and Medical Leadership	Dr. Sachin R. Pendharkar, MD, MSc, FRCPC. Professor of Medicine and Community Health Sciences. Specialist in Respiratory Medicine.	Dr. Stephen Freedman, MDCM, MSc, FRCPC, FAAP Professor of Pediatric and Emergency Medicine Alberta Children's Hospital Foundation Professor in Child Health and Wellness Associate Dean, Clinical Trials, University of Calgary Expertise in pediatric infectious disease emergencies
Dr. Jason Plemel, Ph.D, Canada Research Chair in Glial Neuroimmunology, Associate Professor in Medicine/Neurology, Expertise in how immune responses mount in the brain and spinal cord	Dr. George Chaconas, PhD Professor of Microbiology, Immunology & Infectious Diseases, Expertise in Lyme Disease.	Rebekah DeVinney, Ph.D., Canada Associate Professor Microbiology, Immunology & Infectious Diseases Expertise in <i>E. coli</i> and antimicrobial resistance
Dr. Sue Tsai, Ph.D, Canada Research Chair in Immunometabolism and Diabetes,	Dr. Paul MacEachern, MD, FRCPC	Dr. Kerri A. Johannson MD MPH FRCPC, Respirologist, Associate

Assistant Professor in Immunology, Expertise in studying how metabolic responses impact anti-tumor and vaccine/infection elicited immune responses Specialist in Respiratory Medicine and Clinical Associate Professor of Medicine. Professor of Medicine, University of Calgary, Calgary AB Canada

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Dr. Jim Smiley, Ph.D, Professor Emeritus, Expertise in Molecular Virology Dr. Maria Bravo-Araya, DVM, MSc in Vaccinology & Immunotherapeutics. Board-certified veterinary microbiologist, specialized in virology. Assistant professor, Clinical Veterinary Virologist.

Dr. Andrew M. Leidal, PhD, Assistant Professor, Expertise in Molecular Virology

- Canada PHAo. Guidance on the use of COVID-19 vaccines for 2025 to summer 2026. https://www.canada.ca/en/public-health/services/publications/vaccines-immunization/national-advisory-committee-immunization-statement-guidance-covid-19-vaccines-2025-summer-2026.html. Accessed
- 2. Nasreen S, Febriani Y, Velásquez García HA, Zhang G, Tadrous M, Buchan SA, Righolt CH, Mahmud SM, Janjua NZ, Krajden M, De Serres G, Kwong JC, Investigators obotCIRNPCN. 2022. Clinical Infectious Diseases 76:640-648. 10.1093/cid/ciac634
- Page W. Benefits of Getting Vaccinated. https://www.cdc.gov/covid/vaccines/benefits.html.
 Accessed
- 4. Hamad Saied M, van der Griend L, van Straalen JW, Wulffraat NM, Vastert S, Jansen MHA. 2023. Pediatr Rheumatol Online J 21:80. 10.1186/s12969-023-00848-1
- 5. Yousaf AR, Miller AD, Lindsey K, Shah AB, Wu MJ, Melgar M, Zambrano LD, Campbell AP. 2023. Pediatr Infect Dis J 42:e476-e478. 10.1097/inf.000000000004103
- 6. Trinh NTH, Jödicke AM, Català M, Mercadé-Besora N, Hayati S, Lupattelli A, Prieto-Alhambra D, Nordeng HME. 2024. The Lancet Respiratory Medicine 12:e33-e34. <u>10.1016/S2213-</u>2600(24)00082-1
- 7. Suseeladevi AK, Denholm R, Retford M, Raffetti E, Burden C, Birchenall K, Male V, Walker V, Tomlinson C, Wood AM, Zuccolo L. 2024. The Lancet Regional Health Europe 45. 10.1016/j.lanepe.2024.101025
- 8. Ip S, North T-L, Torabi F, Li Y, Abbasizanjani H, Akbari A, Horne E, Denholm R, Keene S, Denaxas S, Banerjee A, Khunti K, Sudlow C, Whiteley WN, Sterne JAC, Wood AM, Walker V, the CVDC-UKC-IC, the Longitudinal H, Wellbeing C-NCS. 2024. Nature Communications 15:6085. 10.1038/s41467-024-49634-x

- 9. Utami AM, Rendrayani F, Khoiry QA, Noviyanti D, Suwantika AA, Postma MJ, Zakiyah N. 2023. J Glob Health 13:06001. <u>10.7189/jogh.13.06001</u>
- 10. Yang J, Vaghela S, Yarnoff B, De Boisvilliers S, Di Fusco M, Wiemken TL, Kyaw MH, McLaughlin JM, Nguyen JL. 2023. Expert Rev Vaccines 22:54-65. 10.1080/14760584.2023.2157817
- 11. Lam ICH, Zhang R, Man KKC, Wong CKH, Chui CSL, Lai FTT, Li X, Chan EWY, Lau CS, Wong ICK, Wan EYF. 2024. Nature Communications 15:1716. <u>10.1038/s41467-024-45953-1</u>
- 12. Anonymous. COVID-19: Vaccine safety and side effects. https://www.canada.ca/en/public-health/services/diseases/coronavirus-disease-covid-19/vaccines/safety-side-effects.html. Accessed
- 13. Prevention CfDCa. Coronavirus Disease 2019 (COVID-19) Vaccine Safety. https://www.cdc.gov/vaccine-safety/vaccines/covid-19.html. Accessed
- 14. agents CIGPI. COVID-19 vaccines: Canadian Immunization Guide. https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-26-covid-19-vaccine.html. Accessed
- Meslé MMI, Brown J, Mook P, Katz MA, Hagan J, Pastore R, Benka B, Redlberger-Fritz M, Bossuyt N, Stouten V, Vernemmen C, Constantinou E, Maly M, Kynčl J, Sanca O, Krause TG, Vestergaard LS, Leino T, Poukka E, Gkolfinopoulou K, Mellou K, Tsintziloni M, Molnár Z, Aspelund G, Thordardottir M, Domegan L, Kelly E, O'Donell J, Urdiales A-M, Riccardo F, Sacco C, Bumšteinas V, Liausediene R, Mossong J, Vergison A, Borg M-L, Melillo T, Kocinski D, Pollozhani E, Meijerink H, Costa D, Gomes JP, Leite PP, Druc A, Gutu V, Mita V, Lazar M, Popescu R, Popovici O, Musilová M, et al. 2024. The Lancet Respiratory Medicine 12:714-727. 10.1016/S2213-2600(24)00179-6
- 16. Watson OJ, Barnsley G, Toor J, Hogan AB, Winskill P, Ghani AC. 2022. The Lancet Infectious Diseases 22:1293-1302. <u>10.1016/S1473-3099(22)00320-6</u>
- 17. Naggie S, Boulware DR, Lindsell CJ, Stewart TG, Gentile N, Collins S, McCarthy MW, Jayaweera D, Castro M, Sulkowski M, McTigue K, Thicklin F, Felker GM, Ginde AA, Bramante CT, Slandzicki AJ, Gabriel A, Shah NS, Lenert LA, Dunsmore SE, Adam SJ, DeLong A, Hanna G, Remaly A, Wilder R, Wilson S, Shenkman E, Hernandez AF, Interventions AC-T, Group VS, Investigators. 2022. JAMA 328:1595-1603. 10.1001/jama.2022.18590
- 18. Naggie S, Boulware DR, Lindsell CJ, Stewart TG, Slandzicki AJ, Lim SC, Cohen J, Kavtaradze D, Amon AP, Gabriel A, Gentile N, Felker GM, Jayaweera D, McCarthy MW, Sulkowski M, Rothman RL, Wilson S, DeLong A, Remaly A, Wilder R, Collins S, Dunsmore SE, Adam SJ, Thicklin F, Hanna GJ, Ginde AA, Castro M, McTigue K, Shenkman E, Hernandez AF, Interventions AC-T, Group V-S, Investigators. 2023. JAMA 329:888-897. 10.1001/jama.2023.1650
- Reis G, Silva E, Silva DCM, Thabane L, Milagres AC, Ferreira TS, Dos Santos CVQ, Campos VHS, Nogueira AMR, de Almeida A, Callegari ED, Neto ADF, Savassi LCM, Simplicio MIC, Ribeiro LB, Oliveira R, Harari O, Forrest JI, Ruton H, Sprague S, McKay P, Guo CM, Rowland-Yeo K, Guyatt GH, Boulware DR, Rayner CR, Mills EJ, Investigators T. 2022. N Engl J Med 386:1721-1731. 10.1056/NEJMoa2115869
- 20. FDA. Ivermectin and COVID-19. https://www.fda.gov/consumers/consumer-updates/ivermectin-and-covid-19. Accessed
- 21. Manitoba TCoPaSo. IVERMECTIN FOR THE TREATMENT OF COVID-19 FAQS. https://cpsm.mb.ca/assets/COVID19/Ivermectin%20FAQ_Sept%203.pdf. Accessed
- 22. Control BCfD. Treatments. http://www.bccdc.ca/health-info/diseases-conditions/covid-19/treatments. Accessed
- 23. Watch R. Another ivermectin-COVID-19 paper is retracted. https://retractionwatch.com/2022/05/10/another-ivermectin-covid-19-paper-is-retracted/. Accessed
- 24. Pott-Junior H, Paoliello MMB, Miguel AQC, da Cunha AF, de Melo Freire CC, Neves FF, da Silva de Avó LR, Roscani MG, Dos Santos SS, Chach SGF. 2022. Toxicol Rep 9:1023. 10.1016/j.toxrep.2022.04.009

- 25. Elshafie AH, Elsawah HK, Hammad M, Sweed EM, Seif AS, Abdel Ghaffar MM, Goda FM, Mosalam EM, Abdallah MS. 2022. Expert Review of Anti-infective Therapy 20:1341-1350. 10.1080/14787210.2022.2098113
- 26. Hill A, Garratt A, Levi J, Falconer J, Ellis L, McCann K, Pilkington V, Qavi A, Wang J, Wentzel H. 2022. Open Forum Infectious Diseases 9. <u>10.1093/ofid/ofac056</u>
- 27. Chua K-P, Conti RM, Becker NV. 2022. JAMA 327:584-587. 10.1001/jama.2021.24352
- 28. Agency EM. COVID-19 vaccines: key facts. <a href="https://www.ema.europa.eu/en/human-regulatory-overview/public-health-threats/coronavirus-disease-covid-19/covid-19-medicines/covid-19-waccines-key-facts#:~:text=Evidence%20gathered%20from%20hundreds%20of,but%20they%20are%20very%20rare. Accessed
- 29. Foundation C. Pilot Project: COVID-19 Vaccines Poll of Experts. https://clarityfoundation.com/project-one-1. Accessed