EXHIBIT 1: STUDIES CITED OR MENTIONED IN OPPOSITION BY DEFENDANTS

Agency	Opp. Cite	Decl.	Study Cited?	Time (Study)	Population	Study Description	Study Defects ¹ (N/A if not a study)
DOD	2	Stanley ¶ 3	N	2020- 2022	Service Members	"Ninety-six service members have died from COVID-19, and over 400,000 have contracted the disease."	1, 3, 5, 6
						Does not provide any breakdown by time period of when deaths occurred, whether vaccines were available, the variant, etc.	
DOD	28	Stanley ¶¶ 3-13	N	2020- 2021	Service Members	Historical overview of COVID impacts on readiness from from 2020-2021:¶3 (summary statistics for 2020-8/22); ¶¶ 4-6 (Mar. 25, 2022 "60-day stop movement order"); ¶7 (March-April 2020 events); ¶8 (March 2020 COVID outbreak on <i>USS Theodore Roosevelt</i>); ¶¶ 9-12 (summary of first "twenty months"); ¶13 (describing DOD assistance efforts from March 2020 and December 2021)	N/A
NIAID	28, 37	Stanley ¶ 16	N	10/21- 12/21	All U.S.	For October-December 2021, "[r]ates of COVID-19 cases lowest among fully vaccinated persons with a booster dose compared to those with just the primary series, and much lower than among unvaccinated"	1-6
CDC	28, 37	Stanley ¶ 17	N	11/21- 12/21	All U.S.	Describing CDC study results for November and December 2021 finding that in November 2021 "unvaccinated individuals were 15-times more likely to die than a fully vaccinated individual," while in December 2021, they were "16 times more likely to be hospitalized"	1-5
						Also provides comparison vaccine efficacy (VE) for fully vaccinated and boosted to fully vaccinated (two shots), as well as comparison of unvaccinated with previous infection and to fully vaccinated.	
DOD	28, 37	Stanley ¶18	N	7/21- 11/21	Active-Duty Service Members	"[N]on-fully vaccinated active-duty service members "had a 14.6 fold increased risk of being hospitalized when compared to" fully vaccinated active-duty service members.	1, 3, 4, 6

¹ Study defects are identified consistent with those identified as numbers 1-6 in the Reply Brief, Section I at 2-3: (1) limitation to or inclusion of historical data from the 2020 and 2021 pre-Omicron, pre-vaccine phase; (2) analysis of general population, adults, etc., rather than service-members; (3) failure to disaggregate by age, weight/obesity, BMI, health or medical conditions (e.g., high blood pressure, diabetes, etc.) known to be significant risk factors; (4) no citations to study and cannot be verified or included in record; (5) includes or compares "boosters" to unvaccinated; and/or (6) no comparison for natural immunity or non-"vaccine" treatments.

Agency	Opp. Cite	Decl.	Study Cited?	Time (Study)	Population	Study Description	Study Defects ¹ (N/A if not a study)
	28, 37	Stanley ¶18	N	7/21- 11/21	All Adults	"[U]nvaccinated adults were 16-times more likely to be hospitalized than vaccinated adults," while "unvaccinated adults over 50 years of age were 44 times more likely to be hospitalized than individuals who were vaccinated and received a booster dose."	1-4, 6
DOD	28, 37	Stanley ¶18	N	2020- 2022	Service Members	Stating that, "of the 96 deaths among uniformed service members, 92 were not fully vaccinated (another two were of unknown vaccination status, and the remaining two had not received the booster dose."	1, 3, 4, 6
DOD		Stanley ¶19	N	7/20- 7/22	Active-Duty Service Members	"[I]ncremental increase in protection against hospitalization going from the unvaccinated, to the partially vaccinated, to the fully vaccinated, to those who received a booster." For active-duty service members "hospitalized during this two year window, 70% were not fully vaccinated (38% were unvaccinated, 32% were partially unvaccinated." So 30% were fully-vaccinated despite fact that two-thirds of window was pre-Omicron and pre-vaccine mandates—and for the remaining one-third 98% of active-duty service members were fully vaccinated.	1, 3, 4, 6
FDA	2, 28, 37, 40	Rans¶8	Y	N/A	All U.S./ All "Eligible"	"Strongest recommendation for pre-exposure to COVID-19 disease remains vaccination" Citation to FDA guidelines that all those "eligible" for vaccination should be vaccinated. FDA guidelines discuss monoclonal antibodies but emphasize that these treatments "are not a substitute for COVID-19 vaccination and should not be used in unvaccinated individuals for whom COVID-19 vaccination is recommended."	N/A
GAO	2	Rans¶9	Y	N/A	All U.S.	Discussion of GAO website discussing statistics and symptoms for "long COVID" but does not provide details on time period or population(s) studied or sampled; does not appear to address treatments.	N/A
Various Academic	2	Rans¶9	Y	2022	Random Sample / All Adults	Academic long-term studies of "long COVID" symptoms.	N/A
VA		Rans ¶ 10	Y	1/21- 10/21	Veterans	VA study of breakthrough infections comparing veterans vaccinated with primary series compared to unvaccinated with previous infections.	1-3
VA	2	Rans ¶ 11	Y	3/20- 1/21	Veterans	VA study of "long-term cardiovascular outcomes" for veterans or other Veterans Health Administration users (i.e., assessed risks of COVID infection but did not compare treatments or benefits of vaccination). VA and VHS are largely retired military and not reflective of active or reserve service members.	1-3, 6

Case 1:22-cv-00876-AJT-JFA Document 67-1 Filed 09/06/22 Page 3 of 5 PageID# 2518

Agency	Opp. Cite	Decl.	Study Cited?	Time (Study)	Population	Study Description	Study Defects ¹ (N/A if not a study)
DOD	32, 40	Rans ¶ 13	N/A	N/A	Service Members & U.S. Adults	Overview of COVID effects on service members, military readiness, and U.S. population generally, the elderly and those with other risk factors.	N/A
DOD	28	Rans ¶ 14	N/A	N/A	DOD Personnel	Discussion of DOD vaccination statistics	N/A
DOD	32, 33	Rans ¶ 25	N/A	N/A	N/A	Overview of DOD Immunization Program, including DODI 6205.02 and service regulations, including discussion of medical exemptions and COVID testing options.	N/A
CDC	32, 33	Rans¶26	N/A	N/A	N/A	Overview of CDC vaccination recommendations for all eligible population, CDC conclusions that "vaccination following infection further increases protection," (<i>i.e.</i> , recommends vaccination even if prior infection), and that testing "for prior infection is not recommended for the purpose of vaccine decision-making." Does not provide, cite or summarize study results or other relevant evidence.	N/A
CDC	32, 33	Rans ¶ 27	N/A	N/A	N/A	Recites CDC recommendation that "antibody testing is not currently recommended to assess the need for vaccination in an unvaccinated person or to assess immunity to SARS-CoV-2 following COVID-19 vaccination."	N/A
CDC	2 n.1	Rans¶43	Y/N	2020- 2022	All U.S.	Dismisses FDA VAERS safety data reports that included "16,077 preliminary reports of death (0.0026%) among people who received a COVID-19 vaccine," asserting that CDC and FDA review of those reports "identified [only] nine deaths causally associated kkwith J&J/Janssen COVID-19 vaccination."	N/A
						J&J/Janssen data irrelevant because not mandated.	
						Notably fails to address CDC/FDA review of mandated Pfizer/BioNTech and Moderna.	
Air Force	28, 29, 40	Farrell ¶¶ 3-8, 10	N/A	N/A	N/A	Overview of Air Force vaccination policies and requirements.	N/A
Various	40	Farrell¶9	Y	2021	All adults	Overview of CDC and academic studies on risks of transmission, severe disease and hospitalization for all adults.	1-3, 6
						All studies cited in notes 12-21 have a 2021 public date except for studies identified below.	

Case 1:22-cv-00876-AJT-JFA Document 67-1 Filed 09/06/22 Page 4 of 5 PageID# 2519

Agency	Opp. Cite	Decl.	Study Cited?	Time (Study)	Population	Study Description	Study Defects ¹ (N/A if not a study)
Various	40	Farrell¶9	Y	2021	All adults	(1) Note 13 gives a 2022 publication date, but link does not work, so no way to determine study period;	1-3, 6
						(2) Note 17 refers to an "unpublished analysis" of service members, but no link or information given on study period finding that unvaccinated service members were 65.5% more likely to hospitalized than vaccinated service members, a far cry from the 15x rates cited above;	
						(3) Note 19 refers to a 2022 UK Technical Briefing finding "reduced efficacy" against Omicron after two doses, but increasing after a third booster dose.	
						(4) Note 20 reviews data from a CDC reviewing data from 3/21-1/22 study comparing death rates and mechanical ventilation rates for those receiving two or three doses	
CDC	31	Farrell	Y	2021	All U.S.	Summarizing CDC and other studies on effectiveness of masks but not limited to service members and publication dates are all during 2021.	1-3
						Summarizes statistics finding that masks can reduce infection by 10-79%, transmission by 2-29%, and mortality by 45.7%.	
Various	32	Farrell ¶ 15	N/A	N/A	N/A	Discussing temperature checks	N/A
Various	32	Farrell ¶¶ 18-20	N/A	2020- 2021	N/A	Discussing antigen and antibody testing and relative accuracies. All publication dates from 2020-2021 time period.	N/A
Various	32	Farrell¶22	Y	2020- 2021	All U.S.	Discussing evidence and studies regarding antibodies and acquired or natural immunity. Does not provide results for Omicron.	1-3
Various	32	Farrell ¶ 22	2 Y	2020- 2021	All U.S.	Discussing studies comparing re-infection rates and natural immunity compared to infection or re-infection rates for those fully vaccinated.	1-3
						With one exception, all studies were published in 2021 and did not address Omicron; the only study with 2022 publication date (Jan. 19, 2022) addressed an outbreak in November 2021. <i>See</i> note 43.	
Various	31, 32	Farrell ¶¶ 24-25	Y	2020- 2021	All U.S.	Discussing effectiveness of Isolation and Social Distancing. All cited studies from 2020-2021 period for general population.	1-3
Various	32, 33	Farrell ¶¶ 26-27	N/A	N/A	All U.S.	Discussion of herd immunity. Plaintiffs have not raised herd immunity as an issue.	N/A