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Table S1. Bivalent-vaccinated HCW and BA.2.86/JN.1-wave first responder cohorts

	Bivalent HCWs (n=13)	BA.2.86-JN.1 Wave Patients (n=9)
Age in Years at Sample Collection [Median (Range)]	37 (25-48)	53(35-78)
Gender [n (% of Total)]		
Male	8 (61.5%)	4 (44.4%)
Female	5 (38.5%)	5 (55.6%)
Sample Collection Window	Dec. 2022- Jan.2023	Nov. 2023-Feb.2024
Vaccine status [n (% of Total)]		
2-dose Moderna	NA	3 (11.1%)
1-dose Moderna+1-dose Pfizer bivalent	NA	1 (11.1%)
3-dose Pfizer +1-dose Moderna bivalent	1 (7.7%)	0
2-dose Pfizer+1-dose Pfizer bivalent	1 (7.7%)	0
4-dose Pfizer+1-dose Pfizer bivalent	1 (7.7%)	0
3-dose Pfizer+1-dose Pfizer bivalent	3 (23.1%)	0
3-dose Moderna+1-dose Moderna bivalent	6 (46.2%)	1 (11.1%)
2-dose Moderna+1 Pfizer+1-dose Pfizer bivalent	1 (7.7%)	0
3-dose Moderna+1-dose Pfizer bivalent+1-dose Moderna bivalent	0	1 (11.1%)
2-dose Pfizer +1-dose Moderna	0	1 (11.1%)
1-dose Pfizer	0	1 (11.1%)
3-dose Moderana+1-dose XBB.1.5 Moderna monovalent	0	1 (11.1%)
Sample Collection Timing [Median (Range)]		
Days from last vaccination	NA	656 (45-898)
Days post the bivalent dose for recipients	66 (23-108)	NA
COVID-19 positive [n (% of Total)]	9 (69.2%)	9 (100%)
Days before sample collection [Median (Range)]	324 (182-994)	7 (1-10)
Infected Variants		
JN.1/BA.2.86	0	2 (22.2%)
Undetermined	NA	7 (77.8%)

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406 Summary of the demographic information for two cohorts used for neutralization experiments
407 depicted in Figure 2. “NA” means the category is not applicable to the cohort.