

SUPPLEMENTARY TABLE. Characteristics of COVID-19–vaccinated veterans with mild-to-moderate COVID-19 and selected immunosuppressive conditions, by receipt or non-receipt of an antiviral medication (N = 1,196) — Veterans Health Administration, United States, March–September 2022

Characteristic	Receipt of antiviral medication, No. (%)											
	Solid Organ Transplantation			Chronic Lymphocytic Leukemia			Plasma Cell Malignancy			All patients		
	All (N = 317 [100%])	No (N = 223 [70.3%])	Yes (N = 94 [29.7%])	All (N = 472 [100%])	No (N = 324 [68.6%])	Yes (N = 148 [31.4%])	All (N = 407 [100%])	No (N = 314 [77.1%])	Yes (N = 93 [22.9%])	Total (N = 1,196 [100%])	No (N = 861 [72.0%])	Yes (N = 335 [28%])
Age, mean (SD)	64.6 (10.5)	65.1 (10.5)	63.4 (10.5)	75.3 (9.7)	76.3 (9.6)	73.0 (9.5)	72.7 (9.9)	72.9 (10.2)	71.9 (9.0)	71.6 (10.0)	72.2 (10.1)	70.0 (9.6)
Male sex	294 (92.7)	208 (93.3)	86 (91.5)	457 (96.8)	314 (96.9)	143 (96.6)	395 (97.1)	306 (97.5)	89 (95.7)	1146 (95.8)	828 (96.2)	318 (94.9)
Race and ethnicity												
Asian	5 (1.6)	3 (1.3)	2 (2.1)	1 (0.2)	1 (0.3)	0 (0.0)	1 (0.2)	1 (0.3)	0 (0.0)	7 (0.6)	5 (0.6)	2 (0.6)
Black	109 (34.4)	80 (35.9)	29 (30.9)	69 (14.6)	48 (14.8)	21 (14.2)	155 (38.1)	123 (39.2)	32 (34.4)	333 (27.8)	251 (29.2)	82 (24.5)
Native American/ Hawaiian	3 (0.9)	2 (0.9)	1 (1.1)	3 (0.6)	1 (0.3)	2 (1.4)	9 (2.2)	8 (2.5)	1 (1.1)	15 (1.3)	11 (1.3)	4 (1.2)
White	170 (53.6)	121 (54.3)	49 (52.1)	373 (79.0)	257 (79.3)	116 (78.4)	223 (54.8)	169 (53.8)	54 (58.1)	766 (64.0)	547 (63.5)	219 (65.4)
Unknown	30 (9.5)	17 (7.6)	13 (13.8)	26 (5.5)	17 (5.2)	9 (6.1)	19 (4.7)	13 (4.1)	6 (6.5)	75 (6.3)	47 (5.5)	28 (8.4)
Hispanic*	29 (9.1)	21 (9.4)	8 (8.5)	27 (5.7)	20 (6.2)	7 (4.7)	35 (8.6)	29 (9.2)	6 (6.5)	91 (7.6)	70 (8.1)	21 (6.3)
U.S. region where primary vaccination series was completed[†]												
Continental	44 (13.9)	34 (15.2)	10 (10.6)	69 (14.6)	50 (15.4)	19 (12.8)	66 (16.2)	57 (18.2)	9 (9.7)	179 (15.0)	141 (16.4)	38 (11.3)
Midwest	47 (14.8)	34 (15.2)	13 (13.8)	97 (20.6)	63 (19.4)	34 (23.0)	58 (14.3)	45 (14.3)	13 (14.0)	202 (16.9)	142 (16.5)	60 (17.9)
North Atlantic	86 (27.1)	53 (23.8)	33 (35.1)	110 (23.3)	79 (24.4)	31 (20.9)	98 (24.1)	69 (22.0)	29 (31.2)	294 (24.6)	201 (23.3)	93 (27.8)
Pacific	69 (21.8)	46 (20.6)	23 (24.5)	92 (19.5)	57 (17.6)	35 (23.6)	67 (16.5)	47 (15.0)	20 (21.5)	228 (19.1)	150 (17.4)	78 (23.3)
Southeast	70 (22.1)	55 (24.7)	15 (16.0)	103 (21.8)	74 (22.8)	29 (19.6)	114 (28.0)	92 (29.3)	22 (23.7)	287 (24.0)	221 (25.7)	66 (19.7)
Unknown	1 (0.3)	1 (0.4)	0 (0.0)	1 (0.2)	1 (0.3)	0 (0.0)	4 (1.0)	4 (1.3)	0 (0.0)	6 (0.5)	6 (0.7)	0 (0.0)
Vaccine booster [§]	272 (85.8)	186 (83.4)	86 (91.5)	384 (81.4)	256 (79.0)	128 (86.5)	347 (85.3)	264 (84.1)	83 (89.2)	1003 (83.9)	706 (82.0)	297 (88.7)
Comorbidity score (0–6), [¶] mean (SD)	1.70 (1.0)	1.73 (1.0)	1.65 (1.1)	1.09 (1.2)	1.09 (1.2)	1.11 (1.2)	1.21 (1.2)	1.24 (1.2)	1.12 (1.1)	1.29 (1.1)	1.31 (1.1)	1.26 (1.1)
Antiviral drug received**	94 (29.7)	0 (0.0)	94 (100)	148 (31.4)	0 (0.0)	148 (100)	93 (22.9)	0 (0.0)	93 (100)	335 (28.0)	0 (0.0)	335 (100)
Severe COVID-19 ^{††}	42 (13.2)	36 (16.1)	6 (6.4)	94 (19.9)	87 (26.9)	7 (4.7)	71 (17.4)	65 (20.7)	6 (6.5)	207 (17.3)	188 (21.8)	19 (5.7)
Death ^{§§}	8 (2.5)	8 (3.6)	0 (0.0)	11 (2.3)	11 (3.4)	0 (0.0)	11 (2.7)	10 (3.2)	1 (1.1)	30 (2.5)	29 (3.4)	1 (0.3)
Transplanted organ												
Heart	32 (10.1)	24 (10.8)	8 (8.5)	—	—	—	—	—	—	—	—	—
Kidney	215 (67.8)	149 (66.8)	66 (70.2)	—	—	—	—	—	—	—	—	—
Liver	91 (28.7)	63 (28.3)	28 (29.8)	—	—	—	—	—	—	—	—	—
Lung	12 (3.8)	9 (4.0)	3 (3.2)	—	—	—	—	—	—	—	—	—
Pancreas	5 (1.6)	4 (1.8)	1 (1.1)	—	—	—	—	—	—	—	—	—
Multiple	38 (12.0)	26 (11.7)	12 (12.8)	—	—	—	—	—	—	—	—	—
Plasma cell malignancy												

Multiple myeloma	—	—	—	—	—	—	358 (88.0)	275 (87.6)	83 (89.2)	—	—	—
Waldenstrom's macroglobulemia	—	—	—	—	—	—	45 (11.1)	35 (11.1)	10 (10.8)	—	—	—
Both	—	—	—	—	—	—	4 (1.0)	4 (1.3)	0 (0.0)	—	—	—
Treatment^{¶¶}												
Glucocorticoid	267 (84.2)	189 (84.8)	78 (83.0)	252 (53.4)	167 (51.5)	85 (57.4)	232 (57.0)	169 (53.8)	63 (67.7)	751 (62.8)	525 (61.0)	226 (67.5)
Calcineurin inhibitor	263 (83.0)	180 (80.7)	83 (88.3)	—	—	—	—	—	—	263 (22.0)	180 (20.9)	83 (24.7)
mTOR inhibitor	37 (11.7)	29 (13.0)	8 (8.5)	—	—	—	—	—	—	37 (3.1)	29 (3.4)	8 (2.4)
Mycophenolate	272 (85.8)	193 (86.5)	79 (84.0)	—	—	—	—	—	—	272 (22.7)	193 (22.4)	79 (23.6)
Azathioprine	6 (1.9)	3 (1.3)	3 (3.2)	—	—	—	—	—	—	6 (0.5)	3 (0.3)	3 (0.9)
BTK inhibitor	—	—	—	121 (25.6)	78 (24.1)	43 (29.1)	24 (5.9)	17 (5.4)	7 (7.5)	145 (12.1)	95 (11.0)	50 (14.9)
B-cell-depleting	—	—	—	65 (13.8)	47 (14.5)	18 (12.2)	37 (9.1)	26 (8.3)	11 (11.8)	102 (8.5)	73 (8.5)	29 (8.7)
Cytotoxic chemotherapy	—	—	—	56 (11.9)	38 (11.7)	18 (12.2)	94 (23.1)	70 (22.3)	24 (25.8)	150 (12.5)	108 (12.5)	42 (12.5)
Venetoclax	—	—	—	27 (5.7)	18 (5.6)	9 (6.1)	—	—	—	27 (2.3)	18 (2.1)	9 (2.7)
Thalidomide analogues	—	—	—	—	—	—	190 (46.7)	142 (45.2)	48 (51.6)	190 (15.9)	142 (16.5)	48 (14.3)
Proteasome inhibitor	—	—	—	—	—	—	160 (39.3)	121 (38.5)	39 (41.9)	160 (13.4)	121 (14.1)	39 (11.6)
Monoclonal antibody	—	—	—	—	—	—	76 (18.7)	61 (19.4)	15 (16.1)	76 (6.4)	61 (7.1)	15 (4.5)
Other	—	—	—	27 (5.7)	19 (5.9)	8 (5.4)	32 (7.9)	24 (7.6)	8 (8.6)	59 (4.9)	43 (5.0)	16 (4.8)
None	—	—	—	154 (32.6)	112 (34.6)	42 (28.4)	74 (18.2)	62 (19.7)	12 (12.9)	228 (19.1)	174 (20.2)	54 (16.1)

Abbreviations: BTK = Bruton tyrosine kinase; mTOR = mammalian target of rapamycin; SD = standard deviation; VA = Veterans Health Administration.

*VA patients self-report Hispanic or Latino (Hispanic) ethnicity separately from race; therefore, Hispanic patients are also included in the race categories. Persons of Hispanic origin might be of any race but are categorized as Hispanic; all racial groups are non-Hispanic.

[†]*Continental:* Arkansas, Colorado, Louisiana, Mississippi, Montana, Oklahoma, Texas, Utah, and Wyoming; *Midwest:* Illinois, Indiana, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; *North Atlantic:* Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia; *Pacific:* Alaska, Arizona, California, Hawaii, Idaho, Nevada, New Mexico, Oregon, and Washington; and *Southeast:* Alabama, Florida, Georgia, Kentucky, Puerto Rico, South Carolina, and Tennessee.

[§]Receipt of at least one additional vaccine after completion of the initial vaccination series; no attempt was made to determine the number of additional doses.

[¶]A count of the following six comorbidities: Alzheimer's or other dementias, chronic kidney disease, chronic obstructive pulmonary disease, diabetes, heart failure, and peripheral vascular disease.

**Using VA pharmacy records, which do not detect prescriptions sent to non-VA pharmacies, nor some medications given in the emergency department.

^{††}Defined as either death within 28 days of the positive SARS-CoV-2 test performed at the VA, or hospitalization with either administration of dexamethasone or evidence of hypoxemia (minimum pulse oximetry < 94% or any use of supplemental oxygen).

^{§§}Within 28 days of the positive SARS-CoV-2 test performed at the VA.

^{¶¶}Immunosuppressive medication or antineoplastic medication before SARS-CoV-2 infection.