

Supplementary Materials

Supplementary Methods

Geographical Region

The geographical region of the VA hospital each patient was tested in was extracted from structured data, with regions defined using the following mapping from the Corporate Data Warehouse:

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

Supplementary Tables

Supplementary Table 1. Patient characteristics in the full cohort of cancer patients tested for COVID-19, and stratified by patients who were negative or positive for COVID-19. BMI = body mass index, AMI = acute myocardial infarction, CHF = congestive heart failure, PVD = peripheral vascular disease, COPD = chronic obstructive pulmonary disease, MLD = mild liver disease, DIAB = diabetes without complications, DIABWC = diabetes with complications, REND = renal disease, MSLD = moderate or severe liver disease, HCC = hepatocellular carcinoma, CSCC = cutaneous squamous-cell carcinoma, MDS = myelodysplastic syndromes, SCCHN = squamous cell carcinoma of the head and neck, RCC = renal cell carcinoma, Heme = hematological malignancy, Solid = solid tumor, ICI = immune checkpoint inhibitor.

	Overall, n (%)	Negative, n (%)	Positive, n (%)	P
n	22914	21120	1794	
Age (%)				0.16
<50	1542 (6.7)	1416 (6.7)	126 (7.0)	
50-59	2506 (10.9)	2307 (10.9)	199 (11.1)	
60-64	2691 (11.7)	2480 (11.7)	211 (11.8)	
65-69	3335 (14.6)	3108 (14.7)	227 (12.7)	
70-79	8714 (38.0)	8035 (38.0)	679 (37.8)	
>=80	4126 (18.0)	3774 (17.9)	352 (19.6)	
Race (%)				<0.001
White	15856 (69.2)	14986 (71.0)	870 (48.5)	
Black	5430 (23.7)	4618 (21.9)	812 (45.3)	
Other or Unknown	1628 (7.1)	1516 (7.2)	112 (6.2)	
Ethnicity (%)				<0.001
Not Hispanic or Latino	20942 (91.4)	19327 (91.5)	1615 (90.0)	
Hispanic or Latino	1288 (5.6)	1148 (5.4)	140 (7.8)	
Unknown	684 (3.0)	645 (3.1)	39 (2.2)	
Smoking (%)				<0.001
Current	8589 (37.5)	8137 (38.5)	452 (25.2)	
Former	9315 (40.7)	8416 (39.8)	899 (50.1)	
Never	3549 (15.5)	3227 (15.3)	322 (17.9)	
Unknown	1461 (6.4)	1340 (6.3)	121 (6.7)	
BMI (%)				<0.001
Underweight	603 (2.6)	564 (2.7)	39 (2.2)	
Normal	5189 (22.6)	4864 (23.0)	325 (18.1)	
Overweight	7124 (31.1)	6573 (31.1)	551 (30.7)	
Obese	9824 (42.9)	8956 (42.4)	868 (48.4)	
Unknown	174 (0.8)	163 (0.8)	11 (0.6)	
Charlson (%)				<0.001

0	2962 (12.9)	2692 (12.7)	270 (15.1)	
1-2	8215 (35.9)	7512 (35.6)	703 (39.2)	
3-4	6544 (28.6)	6085 (28.8)	459 (25.6)	
>=5	5193 (22.7)	4831 (22.9)	362 (20.2)	
AMI	2231 (9.7)	2079 (9.8)	152 (8.5)	0.07
CHF	5632 (24.6)	5256 (24.9)	376 (21.0)	<0.001
PVD	4808 (21.0)	4495 (21.3)	313 (17.4)	<0.001
COPD	8889 (38.8)	8332 (39.5)	557 (31.0)	<0.001
MLD	2976 (13.0)	2757 (13.1)	219 (12.2)	0.32
DIAB	8949 (39.1)	8226 (38.9)	723 (40.3)	0.27
DIABWC	5999 (26.2)	5543 (26.2)	456 (25.4)	0.46
REND	5876 (25.6)	5382 (25.5)	494 (27.5)	0.06
MSLD	544 (2.4)	516 (2.4)	28 (1.6)	0.02
Treatment Time (%)				0.002
Never Treated	16396 (71.6)	15063 (71.3)	1333 (74.3)	
Treated <= 6 Months Ago	3034 (13.2)	2845 (13.5)	189 (10.5)	
Treated > 6 Months Ago	3484 (15.2)	3212 (15.2)	272 (15.2)	
Esophagus	331 (1.4)	320 (1.5)	11 (0.6)	0.003
HCC	1092 (4.8)	1046 (5.0)	46 (2.6)	<0.001
Lung	2806 (12.2)	2685 (12.7)	121 (6.7)	<0.001
CSCC	1188 (5.2)	1132 (5.4)	56 (3.1)	<0.001
Other Gastrointestinal	353 (1.5)	336 (1.6)	17 (0.9)	0.04
Pancreas	331 (1.4)	315 (1.5)	16 (0.9)	0.05
Brain	522 (2.3)	495 (2.3)	27 (1.5)	0.03
Lymphoma	2370 (10.3)	2247 (10.6)	123 (6.9)	<0.001
Acute Leukemia	288 (1.3)	273 (1.3)	15 (0.8)	0.12
SCCHN	2209 (9.6)	2087 (9.9)	122 (6.8)	<0.001
Melanoma	902 (3.9)	851 (4.0)	51 (2.8)	0.02
Neuroendocrine	344 (1.5)	324 (1.5)	20 (1.1)	0.19
Bone	2251 (9.8)	2110 (10.0)	141 (7.9)	0.004
Breast	462 (2.0)	433 (2.1)	29 (1.6)	0.24
Gastric	698 (3.0)	654 (3.1)	44 (2.5)	0.15
Connective and Soft Tissue	470 (2.1)	440 (2.1)	30 (1.7)	0.28
Hodgkin	202 (0.9)	189 (0.9)	13 (0.7)	0.54
Urothelial	2198 (9.6)	2056 (9.7)	142 (7.9)	0.01
Ill Defined Site	2397 (10.5)	2238 (10.6)	159 (8.9)	0.02
Thyroid	275 (1.2)	256 (1.2)	19 (1.1)	0.65
Rectum	405 (1.8)	377 (1.8)	28 (1.6)	0.55
Skin	8961 (39.1)	8331 (39.4)	630 (35.1)	<0.001

RCC	1245 (5.4)	1151 (5.4)	94 (5.2)	0.75
Chronic Leukemia	504 (2.2)	465 (2.2)	39 (2.2)	1.00
Myeloid Malignancy	1210 (5.3)	1116 (5.3)	94 (5.2)	0.98
Endocrine Glands	949 (4.1)	872 (4.1)	77 (4.3)	0.79
Colon	1299 (5.7)	1188 (5.6)	111 (6.2)	0.35
MDS	374 (1.6)	342 (1.6)	32 (1.8)	0.67
Multiple Myeloma	1081 (4.7)	980 (4.6)	101 (5.6)	0.07
Male Genital	341 (1.5)	309 (1.5)	32 (1.8)	0.33
Prostate	4910 (21.4)	4417 (20.9)	493 (27.5)	<0.001

Supplementary Table 2. Regional data on COVID-19 prevalence and race

Demographics of Cancer Patients Tested for COVID-19 across Regions			
Region	Overall, n	Black, n (% of Overall)	White, n (% of Overall)
Continental	3525	826 (23.4%)	2418 (68.6%)
Midwest	4581	1076 (23.5%)	3267 (71.3%)
North Atlantic	5768	1778 (30.8%)	3736 (64.8%)
Pacific	4464	627 (14.0%)	3222 (72.2%)
Southeast	4576	1123 (24.5%)	3213 (70.2%)
All Regions	22914	5430 (23.7%)	15856 (69.2%)
Prevalence of COVID-19 across Regions			
Region	% Positive in Overall	% Positive in Black	% Positive in White
Continental	7.1	15.3	4.3
Midwest	8.6	19.4	5.2
North Atlantic	14.8	20.7	11.5
Pacific	2.8	3.3	2.8
Southeast	3.7	7.8	2.4
All Regions	7.8	15.0	5.5

Supplementary Table 3. Detailed data on COVID-19 prevalence and race unique by individual VA site (station).

VA Site	Demographics of Cancer Patients Tested for COVID-19 across VA Sites			Prevalence of COVID-19 across VA Sites		
	Overall, n	Black, n (% of Overall)	White, n (% of Overall)	% Positive in Overall	% Positive in Black	% Positive in White
Togus ME	107	0 (0.0%)	100 (93.5%)	1.9%	0.0%	1.0%
White River Junction VT	54	1 (1.9%)	53 (98.1%)	0.0%	0.0%	0.0%
Montana HCS (Fort Harrison MT)	40	1 (2.5%)	35 (87.5%)	0.0%	0.0%	0.0%
Fargo, ND (CACHE 5.0)	61	0 (0.0%)	49 (80.3%)	1.6%	0.0%	2.0%
Sioux Falls SD (CACHE 5.0)	73	2 (2.7%)	63 (86.3%)	1.4%	0.0%	1.6%
Cheyenne WY	63	1 (1.6%)	60 (95.2%)	6.3%	0.0%	6.7%
VA Pacific Islands HCS (Honolulu HI)	45	4 (8.9%)	22 (48.9%)	0.0%	0.0%	0.0%
Wilmington DE	77	30 (39.0%)	43 (55.8%)	10.4%	20.0%	4.7%
Alaska VAHSRO (Anchorage AK)	31	1 (3.2%)	27 (87.1%)	0.0%	0.0%	0.0%
New Mexico HCS (Albuquerque NM)	156	6 (3.8%)	111 (71.2%)	2.6%	0.0%	2.7%
Alexandria, LA	34	10 (29.4%)	23 (67.6%)	11.8%	30.0%	4.3%
Altoona, PA	23	1 (4.3%)	22 (95.7%)	0.0%	0.0%	0.0%
Amarillo HCS (Amarillo TX)	93	3 (3.2%)	69 (74.2%)	3.2%	0.0%	4.3%
Ann Arbor, MI	136	13 (9.6%)	97 (71.3%)	11.0%	23.1%	9.3%
Atlanta, GA	280	186 (66.4%)	78 (27.9%)	10.4%	14.0%	2.6%
Augusta, GA	147	67 (45.6%)	73 (49.7%)	3.4%	4.5%	2.7%
Maryland HCS (Baltimore MD)	142	82 (57.7%)	53 (37.3%)	7.7%	9.8%	3.8%
Battle Creek, MI	22	5 (22.7%)	15 (68.2%)	0.0%	0.0%	0.0%
Bay Pines, FL	357	26 (7.3%)	303 (84.9%)	1.7%	3.8%	1.3%
Beckley, WV	30	5 (16.7%)	25 (83.3%)	0.0%	0.0%	0.0%
Bedford, MA	104	4 (3.8%)	94 (90.4%)	28.8%	25.0%	27.7%
West Texas HCS (Big Spring TX)	8	0 (0.0%)	7 (87.5%)	0.0%	0.0%	0.0%
Biloxi, MS	103	30 (29.1%)	63 (61.2%)	1.9%	0.0%	1.6%
Birmingham, AL	102	41 (40.2%)	57 (55.9%)	5.9%	9.8%	3.5%
Boston HCS (Boston)	391	41 (10.5%)	341 (87.2%)	16.4%	17.1%	15.8%
Bronx, NY	274	156 (56.9%)	101 (36.9%)	47.4%	44.2%	49.5%
Upstate New York HCS	569	92 (16.2%)	458 (80.5%)	6.5%	13.0%	5.0%
Butler, PA	36	1 (2.8%)	33 (91.7%)	2.8%	0.0%	3.0%

Boise, ID	157	1 (0.6%)	136 (86.6%)	1.3%	0.0%	1.5%
Charleston, SC	161	58 (36.0%)	94 (58.4%)	0.0%	0.0%	0.0%
Chicago (Westside), IL	346	259 (74.9%)	67 (19.4%)	22.3%	25.5%	13.4%
Chillicothe, OH	101	4 (4.0%)	89 (88.1%)	3.0%	0.0%	3.4%
Cincinnati, OH	205	43 (21.0%)	157 (76.6%)	3.9%	9.3%	2.5%
Clarksburg, WV	67	2 (3.0%)	65 (97.0%)	1.5%	50.0%	0.0%
Cleveland, OH	297	109 (36.7%)	169 (56.9%)	8.8%	9.2%	8.9%
Coatesville, PA	41	11 (26.8%)	30 (73.2%)	12.2%	18.2%	10.0%
Columbia, SC	221	115 (52.0%)	101 (45.7%)	4.5%	7.0%	2.0%
Miami, FL	255	84 (32.9%)	163 (63.9%)	11.8%	16.7%	9.2%
West Palm Beach, FL	243	46 (18.9%)	184 (75.7%)	4.5%	6.5%	4.3%
North Texas HCS (Dallas TX)	279	84 (30.1%)	165 (59.1%)	5.0%	7.1%	2.4%
Illiana HCS (Danville IL)	60	6 (10.0%)	52 (86.7%)	0.0%	0.0%	0.0%
Dayton, OH	162	40 (24.7%)	116 (71.6%)	1.9%	2.5%	1.7%
Detroit, MI	192	131 (68.2%)	56 (29.2%)	28.1%	31.3%	17.9%
Eastern Colorado HCS (Denver CO)	473	64 (13.5%)	369 (78.0%)	8.7%	12.5%	7.3%
North Chicago, IL	123	40 (32.5%)	78 (63.4%)	13.8%	17.5%	11.5%
Dublin, GA	87	36 (41.4%)	50 (57.5%)	0.0%	0.0%	0.0%
Durham, NC	274	79 (28.8%)	180 (65.7%)	4.4%	8.9%	2.8%
New Jersey HCS (East Orange)	295	152 (51.5%)	126 (42.7%)	42.7%	42.8%	43.7%
Erie, PA	49	3 (6.1%)	42 (85.7%)	0.0%	0.0%	0.0%
Fayetteville, AR	40	0 (0.0%)	38 (95.0%)	2.5%	0.0%	2.6%
Fayetteville, NC	110	49 (44.5%)	53 (48.2%)	1.8%	2.0%	1.9%
Black Hills HCS (Fort Meade SD) (CACHE 5.0)	71	1 (1.4%)	64 (90.1%)	0.0%	0.0%	0.0%
Central California HCS (Fresno CA)	104	6 (5.8%)	81 (77.9%)	1.0%	0.0%	1.2%
N. Florida/S. Georgia HCS (Gainesville FL)	381	63 (16.5%)	293 (76.9%)	2.4%	7.9%	1.0%
Grand Junction, CO	33	1 (3.0%)	31 (93.9%)	12.1%	0.0%	12.9%
Hines, IL	319	100 (31.3%)	206 (64.6%)	11.0%	16.0%	8.3%
Houston, TX	241	87 (36.1%)	145 (60.2%)	1.7%	2.3%	1.4%
Huntington, WV	62	1 (1.6%)	59 (95.2%)	0.0%	0.0%	0.0%
Indianapolis, IN	284	68 (23.9%)	211 (74.3%)	17.6%	22.1%	15.2%
Iron Mountain, MI	22	0 (0.0%)	20 (90.9%)	4.5%	0.0%	5.0%
Jackson, MS	62	28 (45.2%)	29 (46.8%)	6.5%	7.1%	6.9%
VA Heartland West (Kansas City MO)	447	60 (13.4%)	370 (82.8%)	3.8%	10.0%	3.0%
Hampton, VA	103	60 (58.3%)	36 (35.0%)	6.8%	8.3%	5.6%
Southern Nevada HCS (Las Vegas NV)	119	26 (21.8%)	80 (67.2%)	7.6%	11.5%	5.0%
Lebanon, PA	113	10 (8.8%)	100 (88.5%)	11.5%	10.0%	12.0%

Lexington, KY	244	20 (8.2%)	218 (89.3%)	1.2%	5.0%	0.9%
Central Arkansas HCS (Little Rock AR)	251	64 (25.5%)	178 (70.9%)	1.2%	1.6%	1.1%
Long Beach HCS (Long Beach CA)	315	57 (18.1%)	197 (62.5%)	4.1%	5.3%	4.1%
Louisville, KY	340	66 (19.4%)	268 (78.8%)	4.1%	7.6%	3.4%
Loma Linda, CA	267	42 (15.7%)	185 (69.3%)	2.2%	0.0%	2.2%
Madison, WI	176	4 (2.3%)	167 (94.9%)	1.1%	0.0%	1.2%
Manchester, NH	34	1 (2.9%)	32 (94.1%)	0.0%	0.0%	0.0%
Northern Indiana HCS (Marion, IN)	76	8 (10.5%)	67 (88.2%)	2.6%	0.0%	3.0%
Northern California HCS (Martinez CA)	211	28 (13.3%)	156 (73.9%)	2.4%	0.0%	2.6%
Martinsburg, WV	107	13 (12.1%)	88 (82.2%)	3.7%	0.0%	4.5%
Memphis, TN	64	39 (60.9%)	24 (37.5%)	7.8%	10.3%	4.2%
Minneapolis, MN (CACHE 5.0)	301	19 (6.3%)	259 (86.0%)	5.6%	21.1%	4.6%
Central Alabama HCS (Montgomery AL)	54	33 (61.1%)	19 (35.2%)	5.6%	9.1%	0.0%
Hudson Valley HCS (Castle Point, Montrose)	100	24 (24.0%)	70 (70.0%)	37.0%	41.7%	34.3%
Mountain Home, TN	110	3 (2.7%)	104 (94.5%)	2.7%	0.0%	2.9%
Muskogee, OK	238	25 (10.5%)	193 (81.1%)	1.7%	0.0%	1.6%
Tennessee Valley HCS (Nashville TN)	445	84 (18.9%)	338 (76.0%)	2.9%	7.1%	2.1%
New Orleans, LA	402	231 (57.5%)	149 (37.1%)	30.3%	39.8%	17.4%
New York HHS (Brooklyn)	203	101 (49.8%)	82 (40.4%)	47.8%	51.5%	41.5%
Northampton, MA	59	11 (18.6%)	43 (72.9%)	6.8%	0.0%	7.0%
Northport, NY	143	22 (15.4%)	118 (82.5%)	30.8%	31.8%	30.5%
Oklahoma City, OK	265	31 (11.7%)	209 (78.9%)	3.8%	3.2%	4.3%
Central Plains HCS (Omaha NE)	364	13 (3.6%)	330 (90.7%)	4.9%	15.4%	4.5%
Asheville, NC	141	10 (7.1%)	129 (91.5%)	2.1%	0.0%	2.3%
Palo Alto HCS (Palo Alto CA)	326	36 (11.0%)	235 (72.1%)	3.1%	2.8%	3.0%
Philadelphia, PA	263	165 (62.7%)	88 (33.5%)	20.2%	23.6%	12.5%
Phoenix, AZ	152	11 (7.2%)	125 (82.2%)	2.6%	0.0%	3.2%
Pittsburgh HCS (Pittsburgh PA)	209	48 (23.0%)	159 (76.1%)	3.3%	4.2%	3.1%
Portland, OR (CACHE 5.0)	303	10 (3.3%)	254 (83.8%)	1.0%	0.0%	1.2%
Northern Arizona HCS (Prescott AZ)	96	4 (4.2%)	81 (84.4%)	1.0%	0.0%	0.0%
Providence, RI	88	6 (6.8%)	78 (88.6%)	5.7%	0.0%	6.4%
Richmond, VA	305	152 (49.8%)	148 (48.5%)	7.2%	9.2%	5.4%
Roseburg HCS (Roseburg OR)	50	0 (0.0%)	47 (94.0%)	0.0%	0.0%	0.0%
Sierra Nevada HCS (Reno NV)	109	2 (1.8%)	99 (90.8%)	1.8%	0.0%	2.0%
Saginaw, MI	17	3 (17.6%)	12 (70.6%)	0.0%	0.0%	0.0%

St. Cloud, MN (CACHE 5.0)	116	1 (0.9%)	102 (87.9%)	0.0%	0.0%	0.0%
VA Heartland East (Saint Louis MO)	222	69 (31.1%)	148 (66.7%)	9.5%	24.6%	2.7%
Salem, VA	79	16 (20.3%)	60 (75.9%)	1.3%	0.0%	1.7%
Salisbury, NC	205	56 (27.3%)	146 (71.2%)	6.3%	8.9%	5.5%
Salt Lake City HCS (Salt Lake City UT)	212	5 (2.4%)	198 (93.4%)	2.8%	0.0%	2.5%
San Francisco, CA	279	66 (23.7%)	161 (57.7%)	2.5%	1.5%	3.7%
Puget Sound HCS (Seattle WA) (CACHE 5.0)	551	66 (12.0%)	429 (77.9%)	2.7%	6.1%	2.3%
San Diego HCS (San Diego CA)	340	31 (9.1%)	259 (76.2%)	2.1%	3.2%	1.9%
Sheridan, WY	16	0 (0.0%)	15 (93.8%)	0.0%	0.0%	0.0%
Shreveport, LA	236	102 (43.2%)	121 (51.3%)	5.1%	10.8%	0.8%
Spokane, WA	92	1 (1.1%)	73 (79.3%)	5.4%	0.0%	6.8%
South Texas HCS (San Antonio TX)	214	24 (11.2%)	159 (74.3%)	1.9%	0.0%	2.5%
San Juan, PR	332	35 (10.5%)	281 (84.6%)	3.3%	8.6%	2.8%
Tampa, FL	301	49 (16.3%)	226 (75.1%)	1.0%	2.0%	0.9%
Central Texas HCS (Temple TX)	216	35 (16.2%)	159 (73.6%)	2.3%	0.0%	2.5%
Orlando, FL	395	47 (11.9%)	308 (78.0%)	2.3%	0.0%	2.3%
Tomah, WI	71	1 (1.4%)	70 (98.6%)	0.0%	0.0%	0.0%
Southern Arizona HCS (Tucson AZ)	219	11 (5.0%)	193 (88.1%)	2.3%	0.0%	2.6%
Tuscaloosa, AL	57	25 (43.9%)	31 (54.4%)	1.8%	4.0%	0.0%
Walla Walla, WA	8	0 (0.0%)	7 (87.5%)	0.0%	0.0%	0.0%
Washington DC	395	294 (74.4%)	67 (17.0%)	12.7%	13.3%	7.5%
Connecticut HCS (Westhaven)	433	79 (18.2%)	333 (76.9%)	13.9%	19.0%	12.9%
Greater Los Angeles HCS (Los Angeles CA)	530	217 (40.9%)	261 (49.2%)	5.1%	3.7%	6.5%
White City, OR (CACHE 5.0)	4	1 (25.0%)	3 (75.0%)	0.0%	0.0%	0.0%
Wilkes-Barre, PA	83	0 (0.0%)	81 (97.6%)	3.6%	0.0%	3.7%
Milwaukee, WI	297	73 (24.6%)	219 (73.7%)	9.1%	21.9%	4.6%
Texas Valley Coastal Bend HCS (Harlingen TX)	2	0 (0.0%)	2 (100.0%)	0.0%	0.0%	0.0%
El Paso, TX	4	0 (0.0%)	1 (25.0%)	50.0%	0.0%	100.0%
Columbus, OH	20	4 (20.0%)	14 (70.0%)	5.0%	25.0%	0.0%
All	22914	5430 (23.7%)	15856 (69.2%)	7.8%	15.0%	5.5%

Supplementary Table 4. Odds ratio (OR) as to COVID-19 positive status by cancer type, in univariate logistic regression analysis and multivariate logistic regression, adjusting for race, ethnicity and smoking status. The associated 95% confidence interval and P value is also shown for each analysis. The reference category is COVID-19 negative status.

Cancer Type	Multivariate Analysis		Univariate Analysis	
	OR (95% CI)	P	OR (95% CI)	P
Esophagus	0.48 (0.26-0.89)	0.02	0.4 (0.22-0.73)	0.003
HCC	0.5 (0.37-0.68)	<0.001	0.51 (0.37-0.68)	<0.001
Lung	0.55 (0.45-0.66)	<0.001	0.5 (0.41-0.6)	<0.001
CSCC	0.76 (0.58-1)	0.05	0.57 (0.43-0.75)	<0.001
Other Gastrointestinal	0.57 (0.35-0.94)	0.03	0.59 (0.36-0.97)	0.04
Pancreas	0.57 (0.34-0.96)	0.03	0.59 (0.36-0.98)	0.04
Brain	0.66 (0.45-0.98)	0.04	0.64 (0.43-0.94)	0.02
Lymphoma	0.64 (0.53-0.77)	<0.001	0.62 (0.51-0.75)	<0.001
Acute Leukemia	0.59 (0.35-1)	0.05	0.64 (0.38-1.09)	0.10
SCCHN	0.73 (0.61-0.89)	0.002	0.67 (0.55-0.8)	<0.001
Melanoma	0.97 (0.72-1.3)	0.83	0.7 (0.52-0.93)	0.01
Neuroendocrine	0.73 (0.46-1.16)	0.18	0.72 (0.46-1.14)	0.16
Bone	0.82 (0.68-0.98)	0.03	0.77 (0.64-0.92)	0.004
Breast	0.67 (0.46-0.99)	0.045	0.78 (0.54-1.15)	0.21
Gastric	0.79 (0.58-1.09)	0.15	0.79 (0.58-1.07)	0.13
Connective and Soft Tissue	0.77 (0.53-1.12)	0.17	0.8 (0.55-1.16)	0.24
Hodgkin	0.9 (0.51-1.59)	0.71	0.81 (0.46-1.42)	0.46
Urothelial	0.83 (0.69-0.99)	0.04	0.8 (0.67-0.95)	0.01
Ill Defined Site	0.84 (0.7-0.99)	0.04	0.82 (0.69-0.97)	0.02
Thyroid	0.86 (0.53-1.38)	0.53	0.87 (0.55-1.39)	0.57
Rectum	0.89 (0.6-1.32)	0.56	0.87 (0.59-1.28)	0.49
Skin	1.13 (1.01-1.25)	0.03	0.83 (0.75-0.92)	<0.001
RCC	0.87 (0.7-1.09)	0.23	0.96 (0.77-1.19)	0.71
Chronic Leukemia	1.01 (0.72-1.41)	0.96	0.99 (0.71-1.37)	0.94
Myeloid Malignancy	1.03 (0.83-1.29)	0.76	0.99 (0.8-1.23)	0.94
Endocrine Glands	0.94 (0.74-1.2)	0.63	1.04 (0.82-1.32)	0.74
Colon	1.06 (0.86-1.3)	0.59	1.11 (0.91-1.35)	0.32
MDS	1.02 (0.71-1.49)	0.90	1.1 (0.77-1.59)	0.58
Multiple Myeloma	0.98 (0.79-1.22)	0.86	1.23 (0.99-1.51)	0.06
Male Genital	1.19 (0.81-1.72)	0.37	1.22 (0.85-1.77)	0.28
Prostate	1.09 (0.97-1.22)	0.14	1.43 (1.29-1.6)	<0.001

Supplementary Table 5. Outcomes by Race and COVID-19 Result

	Outcome in COVID-19 Negative patients n (%)		Outcome in COVID-19 Positive patients n (%)		COVID-19 attributable outcome %		Ratio of COVID-19 attributable outcome in AA/White
	White	AA	White	AA	White	AA	
Hospitalization	4835 (32.3)	1365 (29.6)	332 (38.2)	410 (50.5)	5.9	20.9	3.5
ICU	1204 (8.0)	350 (7.6)	159 (18.3)	173 (21.3)	10.3	13.7	1.3
Respiratory Support	191 (1.3)	60 (1.3)	63 (7.2)	72 (8.9)	5.9	7.6	1.3
Death	482 (3.2)	129 (2.8)	122 (14.0)	120 (14.8)	10.8	12	1.1

Supplementary Table 6. Outcomes by Ethnicity and COVID-19 Result

	Outcome in COVID-19 Negative patients n (%)		Outcome in COVID-19 Positive patients n (%)		COVID-19 attributable outcome %		Ratio of COVID-19 attributable outcome in Hispanic or Latino/Not Hispanic or Latino
	Not Hispanic or Latino	Hispanic or Latino	Not Hispanic or Latino	Hispanic or Latino	Not Hispanic or Latino	Hispanic or Latino	
Hospitalization	6123 (31.7)	324 (28.2)	715 (44.3)	54 (38.6)	12.6	10.4	0.8
ICU	1518 (7.9)	86 (7.5)	322 (19.9)	24 (17.1)	12.0	9.6	0.8
Respiratory Support	244 (1.3)	20 (1.7)	133 (8.2)	7 (5.0)	6.9	3.3	0.5
Death	604 (3.1)	34 (3.0)	237 (14.7)	13 (9.3)	11.6	6.3	0.5

Supplementary Table 7. Outcomes by Tumor Type and COVID-19 Result

	Outcome in COVID-19 Negative patients n (%)			Outcome in COVID-19 Positive patients n (%)			COVID-19 attributable outcome %		
	Solid	Heme	Solid and Heme	Solid	Heme	Solid and Heme	Solid	Heme	Solid and Heme
Hospitalization	5211 (29.6)	548 (38.1)	886 (42.8)	626 (42.2)	95 (54.0)	65 (48.5)	12.6	15.9	5.7
ICU	1283 (7.3)	135 (9.4)	237 (11.4)	283 (19.1)	43 (24.4)	27 (20.1)	11.8	15.0	8.7
Respiratory Support	206 (1.2)	23 (1.6)	41 (2.0)	117 (7.9)	19 (10.8)	6 (4.5)	6.7	9.2	2.5
Death	520 (3.0)	45 (3.1)	98 (4.7)	200 (13.5)	30 (17.0)	21 (15.7)	10.5	13.9	11.0

