# Table 1

\*\*Table 1. Baseline summary: Everyone, ABG status, and VBG status\*\*

|  | **Table 1** | | | **Table 2** | |
| --- | --- | --- | --- | --- | --- |
| **Variable** | Everyone1 | **Did not get ABG**  N = 328,0441 | **Did get ABG**  N = 187,2421 | **Did not get VBG**  N = 365,6231 | **Did get VBG**  N = 149,6631 |
| Age (years) | 59.2 ± 17.7; 0.0/515,286.0 missing (0.0%) | 58.1 ± 18.1; 0.0/328,044.0 missing (0.0%) | 61.2 ± 16.9; 0.0/187,242.0 missing (0.0%) | 59.4 ± 17.8; 0.0/365,623.0 missing (0.0%) | 58.9 ± 17.5; 0.0/149,663.0 missing (0.0%) |
| Current BMI kg/m2 | 31.1 ± 8.4; 293,545.0/515,286.0 missing (57.0%) | 32.3 ± 8.7; 184,223.0/328,044.0 missing (56.2%) | 29.0 ± 7.2; 109,322.0/187,242.0 missing (58.4%) | 31.8 ± 8.5; 192,892.0/365,623.0 missing (52.8%) | 28.8 ± 7.4; 100,653.0/149,663.0 missing (67.3%) |
| sex\_label |  |  |  |  |  |
| Female | 253,906 (49%) | 169,023 (52%) | 84,883 (45%) | 184,619 (50%) | 69,287 (46%) |
| Male | 261,380 (51%) | 159,021 (48%) | 102,359 (55%) | 181,004 (50%) | 80,376 (54%) |
| race\_ethnicity\_label |  |  |  |  |  |
| White | 321,174 (62%) | 200,033 (61%) | 121,141 (65%) | 241,114 (66%) | 80,060 (53%) |
| Black or African American | 89,697 (17%) | 62,418 (19%) | 27,279 (15%) | 61,814 (17%) | 27,883 (19%) |
| Hispanic | 33,769 (6.6%) | 23,548 (7.2%) | 10,221 (5.5%) | 22,951 (6.3%) | 10,818 (7.2%) |
| Asian | 8,408 (1.6%) | 4,880 (1.5%) | 3,528 (1.9%) | 5,439 (1.5%) | 2,969 (2.0%) |
| American Indian | 4,055 (0.8%) | 1,971 (0.6%) | 2,084 (1.1%) | 2,128 (0.6%) | 1,927 (1.3%) |
| Pacific Islander | 678 (0.1%) | 460 (0.1%) | 218 (0.1%) | 543 (0.1%) | 135 (<0.1%) |
| Unknown | 57,505 (11%) | 34,734 (11%) | 22,771 (12%) | 31,634 (8.7%) | 25,871 (17%) |
| location\_label |  |  |  |  |  |
| South | 242,266 (47%) | 138,843 (42%) | 103,423 (55%) | 196,774 (54%) | 45,492 (30%) |
| Northeast | 129,446 (25%) | 93,209 (28%) | 36,237 (19%) | 65,537 (18%) | 63,909 (43%) |
| Midwest | 38,471 (7.5%) | 22,924 (7.0%) | 15,547 (8.3%) | 24,891 (6.8%) | 13,580 (9.1%) |
| West | 105,103 (20%) | 73,068 (22%) | 32,035 (17%) | 78,421 (21%) | 26,682 (18%) |
| osa\_label | 90,327 (18%) | 60,653 (18%) | 29,674 (16%) | 65,748 (18%) | 24,579 (16%) |
| asthma\_label | 69,773 (14%) | 48,456 (15%) | 21,317 (11%) | 49,810 (14%) | 19,963 (13%) |
| copd\_label | 100,255 (19%) | 60,214 (18%) | 40,041 (21%) | 70,950 (19%) | 29,305 (20%) |
| chf\_label | 101,458 (20%) | 59,770 (18%) | 41,688 (22%) | 68,964 (19%) | 32,494 (22%) |
| nmd\_label | 20,239 (3.9%) | 11,891 (3.6%) | 8,348 (4.5%) | 14,796 (4.0%) | 5,443 (3.6%) |
| phtn\_label | 41,714 (8.1%) | 23,854 (7.3%) | 17,860 (9.5%) | 27,731 (7.6%) | 13,983 (9.3%) |
| ckd\_label | 91,146 (18%) | 54,528 (17%) | 36,618 (20%) | 61,091 (17%) | 30,055 (20%) |
| diabetes\_label | 148,954 (29%) | 93,007 (28%) | 55,947 (30%) | 101,173 (28%) | 47,781 (32%) |
| encounter\_type\_label |  |  |  |  |  |
| Emergency | 171,727 (33%) | 142,713 (44%) | 29,014 (15%) | 124,405 (34%) | 47,322 (32%) |
| Inpatient | 343,559 (67%) | 185,331 (56%) | 158,228 (85%) | 241,218 (66%) | 102,341 (68%) |
| VBG PCO2 | 46.0 ± 12.7; 365,623.0/515,286.0 missing (71.0%) | 45.5 ± 10.5; 233,430.0/328,044.0 missing (71.2%) | 46.9 ± 15.6; 132,193.0/187,242.0 missing (70.6%) | NA ± NA; 365,623.0/365,623.0 missing (100.0%) | 46.0 ± 12.7; 0.0/149,663.0 missing (0.0%) |
| Arterial PCO2 | 42.6 ± 16.3; 328,044.0/515,286.0 missing (63.7%) | NA ± NA; 328,044.0/328,044.0 missing (100.0%) | 42.6 ± 16.3; 0.0/187,242.0 missing (0.0%) | 42.4 ± 15.5; 233,430.0/365,623.0 missing (63.8%) | 43.1 ± 18.1; 94,614.0/149,663.0 missing (63.2%) |
| 1Mean ± SD; N Missing/No. obs. missing (% Missing); n (%) | | | | | |

# Table 2

\*\*Table 2. Baseline summary by hypercapnia within ABG and VBG cohorts\*\*

|  | **Table 1** | | **Table 2** | |
| --- | --- | --- | --- | --- |
| **Variable** | **Got ABG & Hypercapnia**1 | **Got ABG & No hypercapnia**1 | **Got VBG & Hypercapnia**1 | **Got VBG & No hypercapnia**1 |
| Age (years) | 62.1 ± 16.4; 0.0/57,813.0 missing (0.0%) | 60.8 ± 17.1; 0.0/129,429.0 missing (0.0%) | 61.0 ± 16.7; 0.0/44,017.0 missing (0.0%) | 58.1 ± 17.8; 0.0/105,646.0 missing (0.0%) |
| Current BMI kg/m2 | 29.8 ± 7.9; 33,496.0/57,813.0 missing (57.9%) | 28.6 ± 6.9; 75,826.0/129,429.0 missing (58.6%) | 29.3 ± 7.9; 31,038.0/44,017.0 missing (70.5%) | 28.7 ± 7.2; 69,615.0/105,646.0 missing (65.9%) |
| sex\_label |  |  |  |  |
| Female | 27,116 (47%) | 57,767 (45%) | 20,356 (46%) | 48,931 (46%) |
| Male | 30,697 (53%) | 71,662 (55%) | 23,661 (54%) | 56,715 (54%) |
| race\_ethnicity\_label |  |  |  |  |
| White | 39,784 (69%) | 81,357 (63%) | 24,960 (57%) | 55,100 (52%) |
| Black or African American | 8,082 (14%) | 19,197 (15%) | 8,684 (20%) | 19,199 (18%) |
| Hispanic | 2,757 (4.8%) | 7,464 (5.8%) | 2,464 (5.6%) | 8,354 (7.9%) |
| Asian | 789 (1.4%) | 2,739 (2.1%) | 676 (1.5%) | 2,293 (2.2%) |
| American Indian | 316 (0.5%) | 1,768 (1.4%) | 244 (0.6%) | 1,683 (1.6%) |
| Pacific Islander | 56 (<0.1%) | 162 (0.1%) | 25 (<0.1%) | 110 (0.1%) |
| Unknown | 6,029 (10%) | 16,742 (13%) | 6,964 (16%) | 18,907 (18%) |
| location\_label |  |  |  |  |
| South | 32,694 (57%) | 70,729 (55%) | 15,066 (34%) | 30,426 (29%) |
| Northeast | 12,975 (22%) | 23,262 (18%) | 19,504 (44%) | 44,405 (42%) |
| Midwest | 4,844 (8.4%) | 10,703 (8.3%) | 4,402 (10%) | 9,178 (8.7%) |
| West | 7,300 (13%) | 24,735 (19%) | 5,045 (11%) | 21,637 (20%) |
| osa\_label | 11,965 (21%) | 17,709 (14%) | 8,945 (20%) | 15,634 (15%) |
| asthma\_label | 8,268 (14%) | 13,049 (10%) | 6,544 (15%) | 13,419 (13%) |
| copd\_label | 18,846 (33%) | 21,195 (16%) | 12,846 (29%) | 16,459 (16%) |
| chf\_label | 16,219 (28%) | 25,469 (20%) | 11,921 (27%) | 20,573 (19%) |
| nmd\_label | 2,487 (4.3%) | 5,861 (4.5%) | 1,689 (3.8%) | 3,754 (3.6%) |
| phtn\_label | 7,347 (13%) | 10,513 (8.1%) | 5,449 (12%) | 8,534 (8.1%) |
| ckd\_label | 11,769 (20%) | 24,849 (19%) | 8,765 (20%) | 21,290 (20%) |
| diabetes\_label | 18,521 (32%) | 37,426 (29%) | 14,116 (32%) | 33,665 (32%) |
| encounter\_type\_label |  |  |  |  |
| Emergency | 9,818 (17%) | 19,196 (15%) | 12,611 (29%) | 34,711 (33%) |
| Inpatient | 47,995 (83%) | 110,233 (85%) | 31,406 (71%) | 70,935 (67%) |
| VBG PCO2 | 57.4 ± 18.4; 40,411.0/57,813.0 missing (69.9%) | 42.0 ± 11.2; 91,782.0/129,429.0 missing (70.9%) | 60.2 ± 12.6; 0.0/44,017.0 missing (0.0%) | 40.1 ± 6.6; 0.0/105,646.0 missing (0.0%) |
| Arterial PCO2 | 58.5 ± 20.4; 0.0/57,813.0 missing (0.0%) | 35.5 ± 6.1; 0.0/129,429.0 missing (0.0%) | 52.7 ± 19.6; 26,280.0/44,017.0 missing (59.7%) | 38.6 ± 15.4; 68,334.0/105,646.0 missing (64.7%) |
| 1Mean ± SD; N Missing/No. obs. missing (% Missing); n (%) | | | | |