# Baseline characteristics before and after PS stratification

## HCQ vs. SSZ: AmbEMR

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ | SSZ |  | HCQ | SSZ |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 15-19 | 0.1 | 0.1 | 0.00 | 0.1 | 0.1 | 0.00 |
| 20-24 | 0.7 | 0.6 | 0.01 | 0.7 | 0.6 | 0.01 |
| 25-29 | 1.3 | 1.4 | -0.01 | 1.3 | 1.4 | 0.00 |
| 30-34 | 2.4 | 2.2 | 0.02 | 2.3 | 2.3 | 0.00 |
| 35-39 | 3.5 | 3.7 | -0.01 | 3.5 | 3.4 | 0.01 |
| 40-44 | 5.4 | 5.0 | 0.02 | 5.3 | 5.1 | 0.01 |
| 45-49 | 7.4 | 7.0 | 0.02 | 7.4 | 7.5 | 0.00 |
| 50-54 | 10.4 | 11.0 | -0.02 | 10.5 | 10.5 | 0.00 |
| 55-59 | 13.1 | 13.4 | -0.01 | 13.2 | 12.9 | 0.01 |
| 60-64 | 13.8 | 14.4 | -0.02 | 13.9 | 14.1 | 0.00 |
| 65-69 | 13.7 | 14.2 | -0.01 | 13.8 | 13.7 | 0.00 |
| 70-74 | 13.1 | 13.3 | -0.01 | 13.1 | 13.9 | -0.02 |
| 75-79 | 11.2 | 9.8 | 0.05 | 10.9 | 11.0 | 0.00 |
| 80-84 | 3.9 | 3.9 | 0.00 | 3.9 | 3.7 | 0.01 |
| Gender: female | 79.7 | 74.1 | 0.13 | 78.3 | 78.4 | 0.00 |
| Race |  |  |  |  |  |  |
| race = Asian | 1.4 | 1.5 | -0.02 | 1.4 | 1.3 | 0.00 |
| race = White | 70.9 | 71.7 | -0.02 | 71.1 | 71.3 | 0.00 |
| race = African American | 8.0 | 7.8 | 0.01 | 8.0 | 7.7 | 0.01 |
| Ethnicity |  |  |  |  |  |  |
| ethnicity = Hispanic or Latino | 1.3 | 1.8 | -0.04 | 1.4 | 1.5 | -0.01 |
| ethnicity = Not Hispanic or Latino | 80.3 | 81.0 | -0.02 | 80.5 | 80.3 | 0.00 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 13.5 | 14.2 | -0.02 | 13.7 | 13.8 | 0.00 |
| Attention deficit hyperactivity disorder | 0.6 | 0.4 | 0.02 | 0.6 | 0.5 | 0.01 |
| Chronic liver disease | 1.5 | 1.5 | 0.00 | 1.5 | 1.4 | 0.01 |
| Chronic obstructive lung disease | 7.0 | 7.2 | -0.01 | 7.1 | 6.9 | 0.01 |
| Crohn's disease | 0.4 | 1.1 | -0.08 | 0.5 | 0.6 | -0.02 |
| Dementia | 0.6 | 0.5 | 0.02 | 0.6 | 0.6 | 0.00 |
| Diabetes mellitus | 13.2 | 13.2 | 0.00 | 13.2 | 13.7 | -0.02 |
| Gastroesophageal reflux disease | 15.9 | 14.6 | 0.04 | 15.6 | 15.7 | 0.00 |
| Gastrointestinal hemorrhage | 1.2 | 1.2 | 0.00 | 1.2 | 1.2 | 0.00 |
| Human immunodeficiency virus infection | 0.1 | 0.1 | 0.00 | 0.1 | 0.1 | 0.00 |
| Hyperlipidemia | 29.0 | 28.1 | 0.02 | 28.8 | 29.1 | -0.01 |
| Hypertensive disorder | 38.0 | 37.1 | 0.02 | 37.8 | 38.2 | -0.01 |
| Lesion of liver | 0.9 | 0.8 | 0.01 | 0.9 | 0.8 | 0.01 |
| Obesity | 8.9 | 8.9 | 0.00 | 8.9 | 9.0 | 0.00 |
| Osteoarthritis | 25.5 | 27.1 | -0.04 | 25.8 | 25.2 | 0.01 |
| Pneumonia | 3.1 | 3.4 | -0.01 | 3.2 | 3.1 | 0.01 |
| Psoriasis | 1.5 | 3.2 | -0.11 | 1.7 | 2.0 | -0.02 |
| Renal impairment | 5.3 | 4.8 | 0.02 | 5.2 | 5.3 | -0.01 |
| Rheumatoid arthritis | 84.0 | 82.2 | 0.05 | 83.6 | 84.4 | -0.02 |
| Ulcerative colitis | 0.3 | 1.2 | -0.10 | 0.4 | 0.6 | -0.03 |
| Urinary tract infectious disease | 6.0 | 5.2 | 0.04 | 5.8 | 5.5 | 0.01 |
| Viral hepatitis C | 1.0 | 1.0 | 0.00 | 1.0 | 0.9 | 0.01 |
| Visual system disorder | 8.6 | 8.8 | 0.00 | 8.6 | 8.5 | 0.00 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 3.3 | 3.1 | 0.01 | 3.2 | 3.2 | 0.00 |
| Cerebrovascular disease | 3.1 | 2.8 | 0.02 | 3.1 | 3.1 | 0.00 |
| Coronary arteriosclerosis | 5.7 | 5.6 | 0.00 | 5.7 | 5.6 | 0.00 |
| Heart disease | 15.9 | 14.6 | 0.04 | 15.6 | 15.6 | 0.00 |
| Heart failure | 2.6 | 2.3 | 0.02 | 2.6 | 2.4 | 0.01 |
| Ischemic heart disease | 1.7 | 1.6 | 0.01 | 1.7 | 1.5 | 0.02 |
| Pulmonary embolism | 0.8 | 0.7 | 0.01 | 0.8 | 0.7 | 0.01 |
| Venous thrombosis | 1.3 | 1.2 | 0.01 | 1.3 | 1.4 | -0.01 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 0.4 | 0.3 | 0.02 | 0.4 | 0.4 | 0.01 |
| Malignant lymphoma | 0.4 | 0.5 | -0.01 | 0.4 | 0.6 | -0.03 |
| Malignant neoplasm of anorectum | 0.1 | 0.1 | -0.01 | 0.1 | 0.1 | 0.00 |
| Malignant neoplastic disease | 6.9 | 6.6 | 0.01 | 6.8 | 7.0 | -0.01 |
| Malignant tumor of breast | 1.5 | 1.4 | 0.01 | 1.4 | 1.6 | -0.01 |
| Malignant tumor of colon | 0.3 | 0.3 | 0.00 | 0.3 | 0.3 | -0.01 |
| Malignant tumor of lung | 0.3 | 0.4 | -0.02 | 0.3 | 0.3 | -0.01 |
| Malignant tumor of urinary bladder | 0.2 | 0.3 | -0.01 | 0.2 | 0.2 | 0.00 |
| Primary malignant neoplasm of prostate | 0.4 | 0.3 | 0.00 | 0.4 | 0.3 | 0.01 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 33.2 | 33.6 | -0.01 | 33.3 | 33.6 | -0.01 |
| Antibacterials for systemic use | 24.7 | 25.3 | -0.01 | 24.9 | 24.5 | 0.01 |
| Antidepressants | 36.1 | 34.9 | 0.02 | 35.7 | 35.7 | 0.00 |
| Antiepileptics | 24.0 | 24.1 | 0.00 | 24.0 | 24.0 | 0.00 |
| Antiinflammatory and antirheumatic products | 42.8 | 44.4 | -0.03 | 43.1 | 43.4 | 0.00 |
| Antineoplastic agents | 35.9 | 41.4 | -0.11 | 37.3 | 37.8 | -0.01 |
| Antipsoriatics | 0.6 | 0.7 | 0.00 | 0.6 | 0.7 | 0.00 |
| Antithrombotic agents | 25.2 | 23.5 | 0.04 | 24.9 | 25.2 | -0.01 |
| Beta blocking agents | 25.2 | 25.1 | 0.00 | 25.2 | 25.8 | -0.02 |
| Calcium channel blockers | 17.5 | 17.7 | 0.00 | 17.5 | 17.7 | 0.00 |
| Diuretics | 30.6 | 30.0 | 0.01 | 30.5 | 31.2 | -0.01 |
| Drugs for obstructive airway diseases | 30.9 | 30.0 | 0.02 | 30.8 | 31.0 | 0.00 |
| Drugs used in diabetes | 14.2 | 14.3 | 0.00 | 14.3 | 14.8 | -0.01 |
| Immunosuppressants | 49.4 | 61.2 | -0.24 | 52.2 | 52.1 | 0.00 |
| Lipid modifying agents | 33.2 | 33.7 | -0.01 | 33.3 | 33.5 | 0.00 |
| Opioids | 28.4 | 30.7 | -0.05 | 28.9 | 28.8 | 0.00 |
| Psycholeptics | 26.3 | 25.6 | 0.02 | 26.1 | 26.1 | 0.00 |
| Psychostimulants, agents used for adhd and nootropics | 4.0 | 3.8 | 0.01 | 4.0 | 4.0 | 0.00 |

## HCQ vs. SSZ: CCAE

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ | SSZ |  | HCQ | SSZ |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 20-24 | 1.9 | 1.9 | 0.00 | 1.8 | 2.0 | -0.01 |
| 25-29 | 2.6 | 2.6 | 0.00 | 2.5 | 2.7 | -0.01 |
| 30-34 | 4.5 | 4.6 | 0.00 | 4.5 | 4.4 | 0.00 |
| 40-44 | 9.8 | 9.5 | 0.01 | 9.7 | 9.5 | 0.01 |
| 45-49 | 13.7 | 12.9 | 0.02 | 13.6 | 13.4 | 0.00 |
| 50-54 | 18.2 | 18.1 | 0.00 | 18.2 | 18.0 | 0.01 |
| 55-59 | 20.6 | 21.0 | -0.01 | 20.8 | 20.8 | 0.00 |
| 60-64 | 19.0 | 19.8 | -0.02 | 19.4 | 19.8 | -0.01 |
| 65-69 | 1.8 | 1.7 | 0.00 | 1.8 | 1.6 | 0.01 |
| Gender: female | 82.0 | 74.3 | 0.19 | 80.1 | 79.7 | 0.01 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 35.5 | 34.4 | 0.02 | 35.1 | 34.8 | 0.01 |
| Chronic liver disease | 3.2 | 3.2 | 0.00 | 3.2 | 3.3 | 0.00 |
| Chronic obstructive lung disease | 4.2 | 4.5 | -0.01 | 4.3 | 4.5 | -0.01 |
| Crohn's disease | 0.6 | 1.8 | -0.12 | 0.7 | 1.1 | -0.04 |
| Dementia | 0.2 | 0.2 | 0.01 | 0.2 | 0.2 | 0.00 |
| Depressive disorder | 13.4 | 13.5 | 0.00 | 13.3 | 13.5 | 0.00 |
| Diabetes mellitus | 13.5 | 13.4 | 0.00 | 13.6 | 13.8 | -0.01 |
| Gastroesophageal reflux disease | 13.7 | 13.5 | 0.01 | 13.6 | 13.5 | 0.00 |
| Gastrointestinal hemorrhage | 2.9 | 3.4 | -0.03 | 3.0 | 3.2 | -0.01 |
| Human immunodeficiency virus infection | 0.1 | 0.2 | -0.01 | 0.1 | 0.1 | 0.00 |
| Hyperlipidemia | 31.5 | 30.5 | 0.02 | 31.2 | 31.4 | 0.00 |
| Hypertensive disorder | 34.7 | 34.9 | 0.00 | 34.8 | 35.0 | 0.00 |
| Lesion of liver | 0.9 | 0.8 | 0.01 | 0.9 | 0.8 | 0.00 |
| Obesity | 9.3 | 9.1 | 0.00 | 9.2 | 9.5 | -0.01 |
| Osteoarthritis | 43.4 | 44.4 | -0.02 | 43.5 | 44.2 | -0.01 |
| Pneumonia | 4.0 | 3.9 | 0.00 | 4.0 | 4.0 | 0.00 |
| Psoriasis | 3.0 | 8.9 | -0.25 | 3.8 | 5.2 | -0.07 |
| Renal impairment | 3.1 | 2.8 | 0.02 | 3.0 | 2.8 | 0.01 |
| Rheumatoid arthritis | 84.2 | 85.7 | -0.04 | 84.9 | 85.3 | -0.01 |
| Schizophrenia | 0.1 | 0.1 | -0.01 | 0.1 | 0.1 | -0.01 |
| Ulcerative colitis | 0.6 | 1.9 | -0.12 | 0.7 | 1.0 | -0.04 |
| Urinary tract infectious disease | 11.9 | 10.8 | 0.03 | 11.6 | 11.5 | 0.00 |
| Viral hepatitis C | 1.1 | 1.0 | 0.01 | 1.1 | 1.0 | 0.01 |
| Visual system disorder | 25.7 | 26.2 | -0.01 | 25.7 | 25.9 | 0.00 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 1.4 | 1.3 | 0.02 | 1.4 | 1.3 | 0.01 |
| Cerebrovascular disease | 2.8 | 2.6 | 0.01 | 2.8 | 2.9 | -0.01 |
| Heart disease | 15.7 | 15.0 | 0.02 | 15.5 | 15.4 | 0.00 |
| Heart failure | 1.9 | 2.0 | 0.00 | 1.9 | 2.0 | 0.00 |
| Ischemic heart disease | 2.9 | 3.1 | -0.01 | 3.0 | 3.1 | -0.01 |
| Peripheral vascular disease | 1.6 | 1.5 | 0.01 | 1.5 | 1.6 | -0.01 |
| Pulmonary embolism | 0.8 | 0.5 | 0.03 | 0.8 | 0.6 | 0.02 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 1.0 | 1.0 | 0.00 | 1.0 | 1.0 | 0.00 |
| Malignant lymphoma | 0.5 | 0.5 | 0.00 | 0.5 | 0.4 | 0.02 |
| Malignant neoplasm of anorectum | 0.1 | 0.1 | 0.00 | 0.1 | 0.1 | 0.00 |
| Malignant tumor of breast | 1.8 | 1.6 | 0.02 | 1.7 | 1.7 | 0.00 |
| Malignant tumor of colon | 0.2 | 0.2 | 0.00 | 0.2 | 0.2 | 0.00 |
| Malignant tumor of lung | 0.1 | 0.2 | -0.01 | 0.2 | 0.1 | 0.00 |
| Primary malignant neoplasm of prostate | 0.4 | 0.4 | -0.01 | 0.4 | 0.4 | 0.00 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 24.3 | 24.9 | -0.01 | 24.5 | 24.6 | 0.00 |
| Antibacterials for systemic use | 43.8 | 44.3 | -0.01 | 43.8 | 44.0 | 0.00 |
| Antidepressants | 36.4 | 36.5 | 0.00 | 36.3 | 36.5 | 0.00 |
| Antiepileptics | 20.3 | 21.0 | -0.02 | 20.4 | 20.2 | 0.00 |
| Antiinflammatory and antirheumatic products | 55.3 | 57.4 | -0.04 | 55.8 | 56.7 | -0.02 |
| Antineoplastic agents | 30.7 | 37.8 | -0.15 | 33.0 | 33.1 | 0.00 |
| Antipsoriatics | 0.7 | 1.2 | -0.06 | 0.7 | 1.0 | -0.03 |
| Antithrombotic agents | 7.4 | 7.3 | 0.01 | 7.4 | 7.3 | 0.00 |
| Beta blocking agents | 15.8 | 16.2 | -0.01 | 15.9 | 16.2 | -0.01 |
| Calcium channel blockers | 11.7 | 11.5 | 0.01 | 11.7 | 11.8 | 0.00 |
| Drugs for acid related disorders | 32.3 | 33.6 | -0.03 | 32.6 | 32.6 | 0.00 |
| Drugs for obstructive airway diseases | 29.7 | 29.3 | 0.01 | 29.5 | 29.5 | 0.00 |
| Drugs used in diabetes | 10.4 | 10.5 | 0.00 | 10.5 | 10.8 | -0.01 |
| Immunosuppressants | 39.6 | 53.0 | -0.27 | 43.4 | 43.6 | 0.00 |
| Lipid modifying agents | 22.6 | 23.5 | -0.02 | 22.8 | 23.2 | -0.01 |
| Opioids | 38.5 | 40.7 | -0.05 | 39.0 | 39.3 | -0.01 |
| Psycholeptics | 33.6 | 33.7 | 0.00 | 33.4 | 33.3 | 0.00 |
| Psychostimulants, agents used for adhd and nootropics | 5.9 | 5.6 | 0.01 | 5.8 | 5.7 | 0.01 |

## HCQ vs. SSZ: CPRD

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ | SSZ |  | HCQ | SSZ |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 15-19 | 0.3 | 0.2 | 0.01 | 0.3 | 0.2 | 0.00 |
| 20-24 | 0.8 | 1.0 | -0.02 | 0.9 | 0.9 | -0.01 |
| 25-29 | 1.2 | 1.7 | -0.04 | 1.4 | 1.6 | -0.02 |
| 30-34 | 2.7 | 3.1 | -0.02 | 3.0 | 3.0 | 0.00 |
| 35-39 | 4.6 | 4.6 | 0.00 | 4.7 | 4.6 | 0.01 |
| 40-44 | 5.6 | 6.6 | -0.04 | 6.2 | 6.4 | 0.00 |
| 45-49 | 8.9 | 8.1 | 0.03 | 8.6 | 8.5 | 0.00 |
| 50-54 | 11.4 | 10.8 | 0.02 | 11.2 | 10.9 | 0.01 |
| 55-59 | 13.2 | 12.6 | 0.02 | 13.4 | 12.8 | 0.02 |
| 60-64 | 13.1 | 13.2 | 0.00 | 12.8 | 13.0 | -0.01 |
| 65-69 | 12.6 | 12.7 | 0.00 | 12.6 | 12.7 | 0.00 |
| 70-74 | 10.8 | 11.6 | -0.02 | 11.2 | 11.2 | 0.00 |
| 80-84 | 4.5 | 4.3 | 0.01 | 4.2 | 4.4 | -0.01 |
| 85-89 | 1.6 | 1.3 | 0.03 | 1.3 | 1.4 | -0.01 |
| 90-94 | 0.3 | 0.2 | 0.03 | 0.3 | 0.2 | 0.03 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 9.2 | 9.1 | 0.00 | 9.4 | 9.3 | 0.01 |
| Chronic obstructive lung disease | 2.3 | 2.0 | 0.02 | 2.2 | 2.0 | 0.01 |
| Crohn's disease | <0.1 | 0.1 | -0.03 | 0.1 | 0.1 | -0.01 |
| Depressive disorder | 2.7 | 3.2 | -0.03 | 3.0 | 3.1 | 0.00 |
| Diabetes mellitus | 2.2 | 2.1 | 0.01 | 2.1 | 2.2 | -0.01 |
| Gastroesophageal reflux disease | 0.5 | 0.4 | 0.02 | 0.4 | 0.4 | 0.00 |
| Gastrointestinal hemorrhage | 1.0 | 1.4 | -0.04 | 1.2 | 1.4 | -0.02 |
| Hyperlipidemia | 1.2 | 1.0 | 0.02 | 1.2 | 1.0 | 0.01 |
| Hypertensive disorder | 3.0 | 3.9 | -0.05 | 3.2 | 3.6 | -0.02 |
| Lesion of liver | 0.1 | 0.1 | 0.01 | 0.1 | 0.1 | 0.01 |
| Obesity | 0.4 | 0.5 | -0.01 | 0.4 | 0.5 | -0.01 |
| Osteoarthritis | 7.6 | 10.4 | -0.10 | 8.6 | 8.9 | -0.01 |
| Pneumonia | 0.8 | 0.6 | 0.03 | 0.9 | 0.6 | 0.03 |
| Psoriasis | 0.7 | 1.9 | -0.10 | 1.2 | 1.5 | -0.03 |
| Renal impairment | 2.3 | 1.8 | 0.03 | 1.9 | 2.2 | -0.02 |
| Rheumatoid arthritis | 61.3 | 72.3 | -0.24 | 67.4 | 66.3 | 0.02 |
| Visual system disorder | 7.0 | 6.9 | 0.00 | 6.7 | 6.9 | -0.01 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 0.7 | 0.7 | 0.00 | 0.8 | 0.7 | 0.02 |
| Cerebrovascular disease | 0.4 | 0.8 | -0.05 | 0.5 | 0.7 | -0.03 |
| Coronary arteriosclerosis | 0.1 | 0.1 | 0.00 | 0.1 | 0.1 | 0.00 |
| Heart disease | 3.0 | 3.4 | -0.02 | 3.4 | 3.1 | 0.01 |
| Heart failure | 0.5 | 0.7 | -0.02 | 0.7 | 0.6 | 0.01 |
| Ischemic heart disease | 1.0 | 1.5 | -0.04 | 1.2 | 1.3 | -0.01 |
| Peripheral vascular disease | 0.2 | 0.2 | 0.01 | 0.3 | 0.2 | 0.02 |
| Pulmonary embolism | 0.2 | 0.2 | -0.01 | 0.2 | 0.2 | -0.02 |
| Venous thrombosis | 0.8 | 1.0 | -0.01 | 0.9 | 1.0 | 0.00 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Malignant neoplastic disease | 1.3 | 1.0 | 0.02 | 1.1 | 1.0 | 0.01 |
| Malignant tumor of breast | 0.1 | 0.1 | 0.00 | 0.1 | 0.1 | -0.01 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 22.0 | 16.8 | 0.13 | 19.4 | 19.4 | 0.00 |
| Antibacterials for systemic use | 37.3 | 35.0 | 0.05 | 35.7 | 36.2 | -0.01 |
| Antidepressants | 26.6 | 22.6 | 0.09 | 25.0 | 24.9 | 0.00 |
| Antiepileptics | 6.5 | 4.3 | 0.10 | 5.4 | 5.2 | 0.01 |
| Antiinflammatory and antirheumatic products | 60.5 | 67.7 | -0.15 | 64.3 | 63.8 | 0.01 |
| Antineoplastic agents | 51.4 | 28.6 | 0.48 | 39.3 | 40.8 | -0.03 |
| Antipsoriatics | 0.7 | 1.3 | -0.06 | 0.9 | 1.2 | -0.02 |
| Antithrombotic agents | 17.9 | 16.7 | 0.03 | 17.3 | 17.2 | 0.00 |
| Beta blocking agents | 14.4 | 13.5 | 0.03 | 14.4 | 13.9 | 0.02 |
| Calcium channel blockers | 15.5 | 12.1 | 0.10 | 13.4 | 13.6 | 0.00 |
| Diuretics | 19.0 | 20.9 | -0.05 | 20.0 | 20.1 | 0.00 |
| Drugs for acid related disorders | 58.3 | 51.0 | 0.15 | 54.1 | 54.6 | -0.01 |
| Drugs used in diabetes | 7.1 | 5.8 | 0.05 | 6.2 | 6.6 | -0.02 |
| Immunosuppressants | 55.2 | 30.0 | 0.53 | 42.2 | 43.0 | -0.02 |
| Lipid modifying agents | 23.0 | 17.1 | 0.15 | 19.5 | 19.8 | -0.01 |
| Opioids | 36.3 | 41.1 | -0.10 | 39.0 | 38.9 | 0.00 |
| Psycholeptics | 16.5 | 16.4 | 0.00 | 16.7 | 16.5 | 0.00 |
| Psychostimulants, agents used for adhd and nootropics | 0.1 | 0.1 | 0.01 | 0.1 | 0.1 | 0.01 |

## HCQ vs. SSZ: DAGermany

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ | SSZ |  | HCQ | SSZ |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 15-19 | 0.3 | 0.5 | -0.03 | 0.3 | 0.5 | -0.03 |
| 20-24 | 1.1 | 1.3 | -0.02 | 1.1 | 1.2 | -0.01 |
| 25-29 | 1.9 | 2.4 | -0.04 | 2.0 | 2.4 | -0.03 |
| 30-34 | 2.4 | 3.5 | -0.07 | 2.9 | 3.0 | -0.01 |
| 35-39 | 4.0 | 4.1 | -0.01 | 3.9 | 4.1 | -0.01 |
| 40-44 | 5.8 | 6.6 | -0.03 | 6.1 | 6.3 | -0.01 |
| 50-54 | 12.0 | 12.7 | -0.02 | 12.7 | 12.5 | 0.01 |
| 55-59 | 14.2 | 14.8 | -0.02 | 14.8 | 14.9 | 0.00 |
| 60-64 | 13.2 | 12.1 | 0.03 | 12.3 | 12.4 | 0.00 |
| 65-69 | 11.4 | 10.6 | 0.03 | 11.2 | 10.6 | 0.02 |
| 70-74 | 10.2 | 9.5 | 0.02 | 9.8 | 9.7 | 0.00 |
| 75-79 | 9.1 | 7.5 | 0.06 | 8.2 | 8.1 | 0.01 |
| 80-84 | 4.4 | 3.9 | 0.02 | 4.2 | 4.0 | 0.01 |
| 85-89 | 1.4 | 1.0 | 0.04 | 1.2 | 1.0 | 0.02 |
| 90-94 | 0.2 | 0.2 | 0.00 | 0.2 | 0.2 | 0.00 |
| Gender: female | 81.4 | 72.5 | 0.21 | 76.0 | 77.2 | -0.03 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 11.9 | 12.6 | -0.02 | 12.2 | 12.0 | 0.01 |
| Attention deficit hyperactivity disorder | <0.1 | 0.1 | -0.01 | <0.1 | <0.1 | 0.02 |
| Chronic liver disease | 0.6 | 0.3 | 0.05 | 0.6 | 0.3 | 0.05 |
| Chronic obstructive lung disease | 3.4 | 4.0 | -0.03 | 3.4 | 3.7 | -0.02 |
| Crohn's disease | 0.2 | 1.5 | -0.14 | 0.5 | 1.0 | -0.06 |
| Dementia | 0.6 | 0.5 | 0.01 | 0.6 | 0.5 | 0.01 |
| Depressive disorder | 8.3 | 8.3 | 0.00 | 8.2 | 8.0 | 0.01 |
| Diabetes mellitus | 6.9 | 7.6 | -0.03 | 7.3 | 7.1 | 0.01 |
| Gastroesophageal reflux disease | 1.9 | 2.0 | -0.01 | 1.9 | 2.0 | 0.00 |
| Gastrointestinal hemorrhage | 0.4 | 0.6 | -0.03 | 0.5 | 0.6 | -0.02 |
| Hyperlipidemia | 7.1 | 8.4 | -0.05 | 8.0 | 7.7 | 0.01 |
| Hypertensive disorder | 18.5 | 19.2 | -0.02 | 19.0 | 18.3 | 0.02 |
| Lesion of liver | 0.5 | 0.3 | 0.03 | 0.4 | 0.3 | 0.02 |
| Obesity | 2.2 | 2.4 | -0.01 | 2.2 | 2.2 | 0.00 |
| Osteoarthritis | 11.4 | 13.2 | -0.06 | 12.4 | 12.1 | 0.01 |
| Pneumonia | 1.9 | 1.5 | 0.03 | 2.0 | 1.6 | 0.04 |
| Psoriasis | 2.3 | 4.4 | -0.12 | 3.7 | 3.5 | 0.01 |
| Renal impairment | 2.6 | 2.3 | 0.02 | 2.4 | 2.4 | 0.00 |
| Rheumatoid arthritis | 46.4 | 54.7 | -0.17 | 52.4 | 50.1 | 0.04 |
| Schizophrenia | <0.1 | 0.1 | -0.03 | <0.1 | 0.1 | -0.01 |
| Ulcerative colitis | 0.2 | 1.6 | -0.16 | 0.4 | 1.1 | -0.08 |
| Urinary tract infectious disease | 4.0 | 4.1 | -0.01 | 4.0 | 3.9 | 0.00 |
| Viral hepatitis C | 0.3 | 0.1 | 0.04 | 0.3 | 0.1 | 0.04 |
| Visual system disorder | 5.8 | 5.6 | 0.01 | 5.6 | 5.5 | 0.01 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 0.8 | 0.8 | 0.00 | 0.8 | 0.7 | 0.00 |
| Cerebrovascular disease | 1.4 | 1.8 | -0.03 | 1.4 | 1.6 | -0.02 |
| Coronary arteriosclerosis | 1.0 | 1.1 | -0.01 | 1.1 | 1.1 | 0.00 |
| Heart disease | 10.5 | 11.4 | -0.03 | 10.6 | 10.6 | 0.00 |
| Heart failure | 2.1 | 2.6 | -0.04 | 2.0 | 2.4 | -0.03 |
| Ischemic heart disease | 4.3 | 5.2 | -0.04 | 4.7 | 4.6 | 0.00 |
| Peripheral vascular disease | 1.0 | 1.0 | 0.00 | 0.9 | 0.9 | 0.00 |
| Pulmonary embolism | 0.6 | 0.3 | 0.04 | 0.6 | 0.4 | 0.03 |
| Venous thrombosis | 1.3 | 1.4 | -0.02 | 1.5 | 1.5 | 0.00 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 0.3 | 0.2 | 0.03 | 0.3 | 0.2 | 0.02 |
| Malignant lymphoma | 0.2 | 0.2 | 0.01 | 0.2 | 0.1 | 0.01 |
| Malignant neoplasm of anorectum | 0.2 | 0.2 | 0.01 | 0.1 | 0.1 | 0.00 |
| Malignant neoplastic disease | 3.4 | 3.2 | 0.01 | 3.2 | 3.2 | 0.00 |
| Malignant tumor of breast | 0.7 | 0.6 | 0.01 | 0.6 | 0.6 | 0.00 |
| Malignant tumor of colon | 0.3 | 0.1 | 0.03 | 0.3 | 0.1 | 0.04 |
| Malignant tumor of lung | <0.1 | <0.1 | 0.02 | <0.1 | <0.1 | 0.00 |
| Malignant tumor of urinary bladder | <0.1 | 0.2 | -0.05 | <0.1 | 0.2 | -0.05 |
| Primary malignant neoplasm of prostate | 0.2 | 0.3 | -0.03 | 0.2 | 0.2 | -0.02 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 16.7 | 17.1 | -0.01 | 16.8 | 16.5 | 0.01 |
| Antibacterials for systemic use | 12.7 | 14.7 | -0.06 | 13.5 | 13.7 | 0.00 |
| Antiepileptics | 3.0 | 2.3 | 0.04 | 2.6 | 2.2 | 0.02 |
| Antiinflammatory and antirheumatic products | 33.3 | 36.1 | -0.06 | 35.4 | 34.7 | 0.01 |
| Antineoplastic agents | 31.8 | 26.8 | 0.11 | 29.4 | 30.4 | -0.02 |
| Antipsoriatics | 0.2 | 0.3 | -0.01 | 0.2 | 0.2 | 0.00 |
| Antithrombotic agents | 10.1 | 9.9 | 0.01 | 9.6 | 9.4 | 0.01 |
| Beta blocking agents | 13.7 | 13.3 | 0.01 | 13.0 | 13.1 | 0.00 |
| Calcium channel blockers | 7.6 | 7.7 | 0.00 | 7.6 | 7.3 | 0.01 |
| Diuretics | 13.9 | 14.6 | -0.02 | 14.5 | 13.7 | 0.02 |
| Drugs for acid related disorders | 32.1 | 32.7 | -0.01 | 32.3 | 32.5 | 0.00 |
| Drugs for obstructive airway diseases | 7.0 | 7.7 | -0.03 | 7.4 | 7.2 | 0.01 |
| Drugs used in diabetes | 4.4 | 4.8 | -0.02 | 4.7 | 4.5 | 0.01 |
| Immunosuppressants | 40.7 | 35.0 | 0.12 | 38.9 | 38.5 | 0.01 |
| Lipid modifying agents | 7.3 | 9.2 | -0.07 | 8.2 | 8.2 | 0.00 |
| Opioids | 12.5 | 12.9 | -0.01 | 12.2 | 12.3 | 0.00 |
| Psycholeptics | 4.8 | 6.0 | -0.05 | 4.8 | 5.3 | -0.02 |
| Psychostimulants, agents used for adhd and nootropics | 0.2 | 0.4 | -0.03 | 0.2 | 0.3 | -0.03 |

## HCQ vs. SSZ: IMRD

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ | SSZ |  | HCQ | SSZ |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 15-19 | 0.2 | 0.2 | 0.02 | 0.2 | 0.2 | 0.01 |
| 20-24 | 0.8 | 1.0 | -0.03 | 0.8 | 1.0 | -0.02 |
| 25-29 | 1.2 | 1.6 | -0.03 | 1.4 | 1.6 | -0.01 |
| 30-34 | 2.8 | 3.2 | -0.02 | 2.9 | 3.1 | -0.01 |
| 35-39 | 4.8 | 5.0 | -0.01 | 5.0 | 4.8 | 0.01 |
| 40-44 | 6.0 | 6.1 | 0.00 | 6.3 | 6.0 | 0.01 |
| 45-49 | 8.7 | 7.8 | 0.03 | 8.4 | 8.5 | 0.00 |
| 50-54 | 11.3 | 10.8 | 0.02 | 11.2 | 11.0 | 0.01 |
| 55-59 | 13.0 | 12.4 | 0.02 | 12.7 | 12.4 | 0.01 |
| 60-64 | 13.2 | 13.8 | -0.02 | 13.5 | 13.5 | 0.00 |
| 65-69 | 13.0 | 12.8 | 0.01 | 12.9 | 13.0 | 0.00 |
| 70-74 | 11.0 | 11.4 | -0.01 | 11.2 | 11.2 | 0.00 |
| 75-79 | 7.7 | 8.3 | -0.02 | 7.8 | 8.0 | 0.00 |
| 80-84 | 4.4 | 4.1 | 0.02 | 4.1 | 4.2 | 0.00 |
| 85-89 | 1.5 | 1.3 | 0.02 | 1.3 | 1.4 | -0.01 |
| 90-94 | 0.3 | 0.2 | 0.02 | 0.2 | 0.2 | 0.00 |
| Gender: female | 73.2 | 68.0 | 0.11 | 70.7 | 71.0 | 0.00 |
| Race |  |  |  |  |  |  |
| race = Asian | 0.1 | 0.1 | 0.02 | 0.1 | 0.1 | 0.00 |
| race = White | 29.8 | 25.8 | 0.09 | 27.4 | 27.6 | 0.00 |
| race = Asian Indian | 0.7 | 0.4 | 0.04 | 0.6 | 0.5 | 0.02 |
| race = Bangladeshi | 0.1 | <0.1 | 0.02 | <0.1 | <0.1 | 0.02 |
| race = Chinese | 0.1 | <0.1 | 0.03 | 0.1 | <0.1 | 0.03 |
| race = Pakistani | 0.3 | 0.2 | 0.03 | 0.3 | 0.2 | 0.03 |
| race = Black | 0.4 | 0.2 | 0.03 | 0.3 | 0.2 | 0.02 |
| race = African | 0.2 | <0.1 | 0.05 | 0.2 | <0.1 | 0.04 |
| race = European | 0.1 | <0.1 | 0.02 | 0.1 | <0.1 | 0.02 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 9.2 | 9.3 | 0.00 | 9.2 | 9.1 | 0.00 |
| Chronic liver disease | 0.1 | 0.1 | 0.00 | <0.1 | <0.1 | 0.00 |
| Chronic obstructive lung disease | 2.1 | 2.5 | -0.02 | 2.2 | 2.3 | -0.01 |
| Crohn's disease | <0.1 | 0.2 | -0.05 | <0.1 | 0.1 | -0.04 |
| Dementia | 0.2 | 0.1 | 0.03 | 0.1 | 0.1 | 0.02 |
| Depressive disorder | 2.6 | 2.9 | -0.02 | 2.9 | 2.7 | 0.01 |
| Diabetes mellitus | 2.3 | 2.2 | 0.01 | 2.2 | 2.1 | 0.01 |
| Gastroesophageal reflux disease | 0.3 | 0.6 | -0.03 | 0.4 | 0.6 | -0.03 |
| Gastrointestinal hemorrhage | 0.9 | 1.3 | -0.04 | 1.0 | 1.1 | -0.01 |
| Hyperlipidemia | 1.1 | 1.3 | -0.02 | 1.1 | 1.2 | 0.00 |
| Hypertensive disorder | 3.1 | 3.7 | -0.03 | 3.2 | 3.3 | 0.00 |
| Lesion of liver | 0.1 | 0.1 | 0.01 | 0.1 | <0.1 | 0.01 |
| Obesity | 0.3 | 0.5 | -0.03 | 0.4 | 0.6 | -0.03 |
| Osteoarthritis | 7.5 | 9.4 | -0.07 | 8.1 | 8.2 | 0.00 |
| Pneumonia | 0.7 | 0.6 | 0.00 | 0.7 | 0.7 | 0.00 |
| Psoriasis | 0.8 | 2.2 | -0.12 | 1.3 | 1.6 | -0.02 |
| Rheumatoid arthritis | 61.4 | 69.3 | -0.17 | 65.6 | 63.7 | 0.04 |
| Schizophrenia | <0.1 | <0.1 | 0.01 | <0.1 | <0.1 | 0.02 |
| Ulcerative colitis | <0.1 | <0.1 | -0.01 | <0.1 | <0.1 | -0.01 |
| Urinary tract infectious disease | 3.1 | 2.9 | 0.01 | 3.1 | 3.0 | 0.01 |
| Visual system disorder | 6.6 | 7.0 | -0.02 | 6.6 | 6.8 | 0.00 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 0.7 | 0.7 | 0.00 | 0.7 | 0.6 | 0.01 |
| Cerebrovascular disease | 0.5 | 0.7 | -0.03 | 0.5 | 0.7 | -0.02 |
| Coronary arteriosclerosis | 0.1 | 0.1 | 0.01 | 0.1 | 0.1 | 0.02 |
| Heart disease | 2.7 | 2.9 | -0.01 | 2.8 | 2.6 | 0.01 |
| Heart failure | 0.4 | 0.4 | -0.01 | 0.4 | 0.4 | 0.01 |
| Ischemic heart disease | 0.8 | 1.2 | -0.04 | 1.0 | 1.0 | 0.00 |
| Peripheral vascular disease | 0.2 | 0.2 | 0.01 | 0.3 | 0.2 | 0.02 |
| Pulmonary embolism | 0.2 | 0.2 | -0.01 | 0.2 | 0.3 | -0.02 |
| Venous thrombosis | 0.8 | 1.1 | -0.03 | 0.8 | 1.1 | -0.02 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 0.1 | 0.1 | 0.01 | 0.1 | <0.1 | 0.02 |
| Malignant neoplasm of anorectum | <0.1 | <0.1 | 0.02 | <0.1 | <0.1 | 0.02 |
| Malignant neoplastic disease | 1.3 | 1.1 | 0.02 | 1.2 | 1.0 | 0.02 |
| Malignant tumor of breast | 0.2 | 0.2 | 0.02 | 0.2 | 0.2 | 0.01 |
| Malignant tumor of colon | <0.1 | <0.1 | -0.01 | <0.1 | <0.1 | 0.00 |
| Malignant tumor of lung | 0.1 | 0.1 | 0.01 | 0.1 | 0.1 | 0.02 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 0.6 | 0.6 | 0.00 | 0.6 | 0.8 | -0.02 |
| Antibacterials for systemic use | 3.8 | 3.4 | 0.02 | 3.6 | 3.5 | 0.01 |
| Antidepressants | 1.1 | 1.1 | -0.01 | 1.0 | 1.2 | -0.02 |
| Antiepileptics | 0.1 | 0.2 | -0.03 | 0.1 | 0.2 | -0.03 |
| Antiinflammatory and antirheumatic products | 1.6 | 1.9 | -0.03 | 1.6 | 1.8 | -0.01 |
| Antineoplastic agents | 1.5 | 0.6 | 0.08 | 1.2 | 0.9 | 0.02 |
| Antithrombotic agents | 1.1 | 1.1 | 0.00 | 1.2 | 1.2 | 0.00 |
| Beta blocking agents | 0.4 | 0.6 | -0.02 | 0.5 | 0.6 | -0.01 |
| Calcium channel blockers | 0.6 | 0.5 | 0.00 | 0.6 | 0.5 | 0.02 |
| Diuretics | 0.8 | 1.0 | -0.02 | 1.0 | 0.9 | 0.01 |
| Drugs for acid related disorders | 1.6 | 1.7 | 0.00 | 1.7 | 1.7 | 0.01 |
| Drugs for obstructive airway diseases | 0.4 | 0.4 | 0.00 | 0.5 | 0.4 | 0.00 |
| Drugs used in diabetes | 0.2 | 0.2 | 0.01 | 0.2 | 0.2 | 0.00 |
| Immunosuppressants | 1.6 | 0.7 | 0.08 | 1.3 | 1.0 | 0.02 |
| Lipid modifying agents | 0.9 | 0.9 | 0.00 | 0.9 | 1.0 | -0.01 |
| Opioids | 0.6 | 0.6 | -0.01 | 0.6 | 0.6 | -0.01 |
| Psycholeptics | 0.4 | 0.5 | -0.01 | 0.4 | 0.4 | -0.01 |

## HCQ vs. SSZ: JMDC

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ | SSZ |  | HCQ | SSZ |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 15-19 | <2.1 | <0.2 | 0.12 | <0.8 | <0.3 | 0.04 |
| 20-24 | 4.1 | 1.1 | 0.19 | 1.4 | 1.2 | 0.02 |
| 25-29 | 5.4 | 2.2 | 0.17 | 1.8 | 2.2 | -0.03 |
| 30-34 | 9.1 | 3.8 | 0.22 | 3.1 | 3.8 | -0.04 |
| 35-39 | 9.5 | 7.4 | 0.08 | 3.2 | 7.1 | -0.17 |
| 40-44 | 15.4 | 10.3 | 0.15 | 38.4 | 10.4 | 0.65 |
| 50-54 | 16.6 | 16.5 | 0.00 | 16.6 | 16.6 | 0.00 |
| 55-59 | 13.7 | 16.0 | -0.06 | 15.6 | 16.3 | -0.02 |
| 60-64 | 4.1 | 13.4 | -0.33 | 1.4 | 13.0 | -0.46 |
| 65-69 | 3.3 | 8.4 | -0.22 | 1.1 | 8.7 | -0.35 |
| 70-74 | <2.1 | 3.4 | -0.22 | <0.8 | 3.6 | -0.26 |
| Gender: female | 89.6 | 68.2 | 0.54 | 85.5 | 69.6 | 0.38 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 57.3 | 52.4 | 0.10 | 63.6 | 53.6 | 0.20 |
| Chronic liver disease | 10.8 | 5.5 | 0.20 | 3.7 | 5.9 | -0.10 |
| Chronic obstructive lung disease | <2.1 | 1.5 | 0.02 | <0.8 | 1.5 | -0.09 |
| Crohn's disease | <2.1 | 0.5 | -0.02 | <0.8 | 0.7 | -0.08 |
| Depressive disorder | 12.0 | 8.6 | 0.11 | 37.3 | 9.2 | 0.66 |
| Diabetes mellitus | 39.8 | 18.5 | 0.48 | 13.5 | 19.8 | -0.16 |
| Gastroesophageal reflux disease | <2.1 | 0.3 | 0.01 | <0.8 | 0.3 | -0.04 |
| Gastrointestinal hemorrhage | 5.4 | 1.3 | 0.23 | 12.8 | 1.4 | 0.42 |
| Hyperlipidemia | 46.5 | 26.4 | 0.43 | 48.9 | 27.5 | 0.43 |
| Hypertensive disorder | 49.0 | 23.6 | 0.55 | 27.6 | 24.8 | 0.06 |
| Lesion of liver | 5.8 | 1.5 | 0.23 | 2.0 | 1.5 | 0.03 |
| Obesity | <2.1 | 0.8 | -0.05 | <0.8 | 0.9 | -0.10 |
| Osteoarthritis | 20.3 | 38.7 | -0.41 | 17.9 | 38.1 | -0.45 |
| Pneumonia | 9.5 | 4.8 | 0.19 | 47.4 | 5.2 | 1.02 |
| Psoriasis | 3.3 | 5.5 | -0.10 | 1.1 | 5.6 | -0.25 |
| Renal impairment | 9.5 | 1.9 | 0.34 | 3.2 | 2.2 | 0.06 |
| Rheumatoid arthritis | 86.3 | 99.0 | -0.50 | 95.4 | 98.9 | -0.20 |
| Schizophrenia | 3.3 | 2.3 | 0.06 | 1.1 | 2.5 | -0.10 |
| Ulcerative colitis | <2.1 | 1.5 | -0.02 | <0.8 | 1.8 | -0.13 |
| Urinary tract infectious disease | 4.6 | 2.5 | 0.11 | 34.7 | 2.8 | 0.83 |
| Viral hepatitis C | 2.5 | 1.8 | 0.05 | 0.8 | 1.8 | -0.08 |
| Visual system disorder | 93.4 | 43.1 | 1.28 | 53.6 | 47.5 | 0.12 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Cerebrovascular disease | 4.1 | 2.8 | 0.08 | 1.4 | 2.9 | -0.10 |
| Coronary arteriosclerosis | <2.1 | <0.2 | 0.05 | <0.8 | <0.3 | -0.02 |
| Heart disease | 40.7 | 12.7 | 0.67 | 13.8 | 13.8 | 0.00 |
| Heart failure | 20.3 | 5.8 | 0.44 | 6.9 | 6.6 | 0.01 |
| Ischemic heart disease | 22.8 | 5.1 | 0.53 | 7.7 | 5.7 | 0.08 |
| Peripheral vascular disease | 6.2 | 2.7 | 0.17 | 2.1 | 2.8 | -0.04 |
| Pulmonary embolism | <2.1 | 0.2 | 0.12 | <0.8 | 0.4 | 0.00 |
| Venous thrombosis | 9.1 | 1.6 | 0.34 | 3.1 | 2.0 | 0.07 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | <2.1 | 0.9 | 0.00 | <0.8 | 0.9 | -0.08 |
| Malignant lymphoma | 2.5 | 1.2 | 0.09 | 0.8 | 1.5 | -0.06 |
| Malignant neoplastic disease | 6.2 | 6.7 | -0.02 | 2.1 | 7.1 | -0.24 |
| Malignant tumor of breast | <2.1 | 1.4 | -0.06 | <0.8 | 1.5 | -0.13 |
| Malignant tumor of colon | <2.1 | 0.6 | -0.03 | <0.8 | 0.6 | -0.08 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 26.1 | 12.7 | 0.35 | 8.9 | 13.5 | -0.14 |
| Antibacterials for systemic use | 71.4 | 50.9 | 0.43 | 79.3 | 52.5 | 0.57 |
| Antidepressants | 10.8 | 7.2 | 0.13 | 3.7 | 7.7 | -0.17 |
| Antiepileptics | 11.6 | 10.9 | 0.02 | 3.9 | 11.6 | -0.28 |
| Antiinflammatory and antirheumatic products | 39.4 | 72.9 | -0.72 | 79.5 | 71.9 | 0.17 |
| Antineoplastic agents | 15.4 | 28.7 | -0.33 | 16.2 | 28.5 | -0.29 |
| Antipsoriatics | 2.1 | 3.2 | -0.07 | <0.8 | 3.4 | -0.19 |
| Antithrombotic agents | 44.8 | 12.1 | 0.78 | 15.2 | 13.3 | 0.05 |
| Beta blocking agents | 7.9 | 3.9 | 0.17 | 13.6 | 4.3 | 0.31 |
| Calcium channel blockers | 19.5 | 12.4 | 0.20 | 17.6 | 12.8 | 0.13 |
| Diuretics | 9.5 | 4.0 | 0.22 | 3.2 | 4.3 | -0.05 |
| Drugs for acid related disorders | 90.0 | 81.8 | 0.24 | 96.6 | 81.8 | 0.48 |
| Drugs for obstructive airway diseases | 25.7 | 23.3 | 0.06 | 52.9 | 24.3 | 0.59 |
| Drugs used in diabetes | 8.7 | 6.6 | 0.08 | 3.0 | 7.1 | -0.19 |
| Immunosuppressants | 66.8 | 32.6 | 0.73 | 33.6 | 33.8 | 0.00 |
| Lipid modifying agents | 27.4 | 14.7 | 0.32 | 9.3 | 15.6 | -0.18 |
| Opioids | 27.4 | 23.3 | 0.09 | 42.5 | 24.4 | 0.37 |
| Psycholeptics | 43.2 | 27.5 | 0.33 | 58.8 | 28.7 | 0.61 |
| Psychostimulants, agents used for adhd and nootropics | <2.1 | 0.9 | -0.06 | <0.8 | 0.9 | -0.11 |

## HCQ vs. SSZ: MDCD

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ | SSZ |  | HCQ | SSZ |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 15-19 | 1.2 | 1.2 | 0.00 | 1.2 | 1.3 | -0.01 |
| 20-24 | 2.1 | 2.8 | -0.04 | 2.1 | 3.1 | -0.06 |
| 25-29 | 4.4 | 3.8 | 0.03 | 4.3 | 4.2 | 0.00 |
| 30-34 | 6.6 | 6.8 | -0.01 | 6.4 | 6.9 | -0.02 |
| 35-39 | 9.0 | 8.8 | 0.01 | 8.8 | 8.8 | 0.00 |
| 40-44 | 10.2 | 9.3 | 0.03 | 10.0 | 9.1 | 0.03 |
| 45-49 | 13.3 | 13.0 | 0.01 | 13.2 | 13.7 | -0.01 |
| 50-54 | 15.9 | 16.1 | 0.00 | 16.2 | 15.9 | 0.01 |
| 55-59 | 15.8 | 16.2 | -0.01 | 15.9 | 15.5 | 0.01 |
| 60-64 | 12.0 | 13.9 | -0.06 | 12.3 | 12.9 | -0.02 |
| 65-69 | 4.5 | 4.0 | 0.02 | 4.6 | 4.2 | 0.02 |
| 70-74 | 2.0 | 1.9 | 0.01 | 2.0 | 1.9 | 0.00 |
| 75-79 | 1.6 | 1.0 | 0.06 | 1.6 | 1.0 | 0.05 |
| 80-84 | 1.0 | 1.0 | 0.00 | 1.0 | 1.0 | 0.00 |
| 85-89 | 0.4 | <0.2 | 0.04 | 0.4 | 0.3 | 0.01 |
| Gender: female | 85.9 | 79.0 | 0.18 | 84.4 | 84.5 | 0.00 |
| Race |  |  |  |  |  |  |
| race = Black or African American | 28.8 | 24.7 | 0.09 | 27.9 | 26.2 | 0.04 |
| race = White | 54.4 | 57.4 | -0.06 | 55.1 | 54.9 | 0.00 |
| Ethnicity |  |  |  |  |  |  |
| ethnicity = Hispanic or Latino | 2.3 | 1.9 | 0.03 | 2.4 | 2.1 | 0.02 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 41.8 | 40.5 | 0.03 | 41.5 | 41.6 | 0.00 |
| Attention deficit hyperactivity disorder | 2.6 | 2.0 | 0.04 | 2.6 | 2.1 | 0.03 |
| Chronic liver disease | 6.9 | 7.4 | -0.02 | 6.9 | 7.4 | -0.02 |
| Chronic obstructive lung disease | 21.0 | 21.6 | -0.02 | 21.2 | 21.5 | -0.01 |
| Crohn's disease | 0.8 | 3.5 | -0.19 | 1.0 | 1.9 | -0.08 |
| Dementia | 1.2 | 0.9 | 0.03 | 1.1 | 1.1 | 0.01 |
| Depressive disorder | 36.0 | 35.4 | 0.01 | 35.5 | 35.8 | -0.01 |
| Gastroesophageal reflux disease | 29.5 | 30.8 | -0.03 | 29.5 | 30.7 | -0.03 |
| Gastrointestinal hemorrhage | 4.9 | 6.4 | -0.06 | 5.0 | 5.9 | -0.04 |
| Human immunodeficiency virus infection | 0.5 | 0.7 | -0.02 | 0.5 | 0.8 | -0.03 |
| Hyperlipidemia | 36.4 | 36.7 | -0.01 | 36.4 | 38.3 | -0.04 |
| Hypertensive disorder | 55.7 | 53.0 | 0.05 | 55.2 | 54.6 | 0.01 |
| Lesion of liver | 2.0 | 1.9 | 0.01 | 2.0 | 2.2 | -0.01 |
| Obesity | 21.5 | 20.0 | 0.04 | 21.2 | 20.2 | 0.02 |
| Osteoarthritis | 57.1 | 57.0 | 0.00 | 57.4 | 57.6 | 0.00 |
| Pneumonia | 8.7 | 8.0 | 0.02 | 8.5 | 8.0 | 0.02 |
| Psoriasis | 2.0 | 6.6 | -0.23 | 2.5 | 3.4 | -0.06 |
| Renal impairment | 9.4 | 8.0 | 0.05 | 9.2 | 8.3 | 0.03 |
| Rheumatoid arthritis | 80.9 | 84.4 | -0.09 | 81.9 | 83.4 | -0.04 |
| Schizophrenia | 1.7 | 2.1 | -0.03 | 1.6 | 2.3 | -0.05 |
| Ulcerative colitis | 0.5 | 1.7 | -0.11 | 0.6 | 1.2 | -0.06 |
| Urinary tract infectious disease | 17.8 | 16.5 | 0.04 | 17.4 | 16.6 | 0.02 |
| Viral hepatitis C | 5.9 | 6.0 | 0.00 | 5.9 | 6.3 | -0.02 |
| Visual system disorder | 39.9 | 40.7 | -0.02 | 40.0 | 39.9 | 0.00 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 3.3 | 2.3 | 0.06 | 3.2 | 3.2 | 0.00 |
| Cerebrovascular disease | 5.3 | 5.2 | 0.00 | 5.1 | 5.3 | -0.01 |
| Coronary arteriosclerosis | 9.7 | 8.7 | 0.04 | 9.6 | 10.1 | -0.02 |
| Heart disease | 29.7 | 26.8 | 0.07 | 29.0 | 28.8 | 0.00 |
| Ischemic heart disease | 7.3 | 7.0 | 0.01 | 7.1 | 8.0 | -0.03 |
| Peripheral vascular disease | 4.8 | 4.1 | 0.03 | 4.6 | 4.3 | 0.02 |
| Pulmonary embolism | 2.0 | 1.0 | 0.08 | 1.9 | 1.6 | 0.02 |
| Venous thrombosis | 3.1 | 2.5 | 0.04 | 2.9 | 3.2 | -0.02 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 1.5 | 1.2 | 0.03 | 1.5 | 1.2 | 0.02 |
| Malignant lymphoma | 0.4 | 0.5 | 0.00 | 0.4 | 0.3 | 0.01 |
| Malignant neoplasm of anorectum | 0.2 | 0.2 | -0.02 | 0.2 | <0.2 | 0.00 |
| Malignant neoplastic disease | 7.2 | 7.5 | -0.01 | 7.1 | 7.4 | -0.02 |
| Malignant tumor of breast | 2.0 | 1.7 | 0.02 | 1.9 | 1.6 | 0.02 |
| Malignant tumor of colon | 0.3 | 0.3 | 0.00 | 0.4 | 0.3 | 0.01 |
| Malignant tumor of lung | 0.4 | 0.3 | 0.02 | 0.4 | 0.3 | 0.02 |
| Malignant tumor of urinary bladder | 0.2 | <0.2 | 0.02 | 0.2 | <0.2 | 0.04 |
| Primary malignant neoplasm of prostate | 0.2 | 0.2 | -0.01 | 0.2 | <0.2 | 0.01 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 32.6 | 32.2 | 0.01 | 32.5 | 32.9 | -0.01 |
| Antibacterials for systemic use | 50.4 | 48.5 | 0.04 | 50.1 | 47.8 | 0.04 |
| Antidepressants | 53.7 | 53.0 | 0.01 | 53.5 | 53.0 | 0.01 |
| Antiepileptics | 43.0 | 41.7 | 0.02 | 42.7 | 42.3 | 0.01 |
| Antiinflammatory and antirheumatic products | 58.2 | 60.0 | -0.04 | 58.4 | 59.8 | -0.03 |
| Antineoplastic agents | 30.7 | 41.0 | -0.22 | 33.9 | 32.0 | 0.04 |
| Antipsoriatics | 0.8 | 0.7 | 0.01 | 0.8 | 0.6 | 0.03 |
| Antithrombotic agents | 18.8 | 17.0 | 0.05 | 18.5 | 17.9 | 0.02 |
| Beta blocking agents | 24.9 | 22.9 | 0.05 | 24.4 | 23.3 | 0.03 |
| Calcium channel blockers | 20.0 | 19.2 | 0.02 | 19.7 | 20.4 | -0.02 |
| Diuretics | 33.7 | 32.1 | 0.04 | 33.3 | 32.7 | 0.02 |
| Drugs for acid related disorders | 50.0 | 51.2 | -0.02 | 50.3 | 48.0 | 0.05 |
| Drugs for obstructive airway diseases | 46.2 | 46.9 | -0.01 | 46.2 | 46.5 | -0.01 |
| Drugs used in diabetes | 18.5 | 19.6 | -0.03 | 18.4 | 19.1 | -0.02 |
| Immunosuppressants | 39.8 | 56.0 | -0.33 | 44.4 | 41.8 | 0.05 |
| Lipid modifying agents | 29.2 | 30.0 | -0.02 | 29.3 | 30.9 | -0.04 |
| Opioids | 62.1 | 62.6 | -0.01 | 62.0 | 62.7 | -0.01 |
| Psycholeptics | 49.8 | 49.5 | 0.00 | 49.3 | 50.0 | -0.01 |
| Psychostimulants, agents used for adhd and nootropics | 7.4 | 6.7 | 0.02 | 7.2 | 6.9 | 0.01 |

## HCQ vs. SSZ: MDCR

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ | SSZ |  | HCQ | SSZ |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 45-49 | 0.1 | <0.1 | 0.01 | 0.1 | <0.1 | 0.01 |
| 55-59 | 0.7 | 1.0 | -0.03 | 0.8 | 0.8 | -0.01 |
| 60-64 | 1.7 | 2.1 | -0.03 | 1.8 | 2.0 | -0.02 |
| 65-69 | 23.7 | 26.3 | -0.06 | 24.4 | 24.4 | 0.00 |
| 70-74 | 28.1 | 30.9 | -0.06 | 28.6 | 28.8 | 0.00 |
| 75-79 | 22.6 | 20.6 | 0.05 | 22.2 | 21.9 | 0.01 |
| 80-84 | 14.6 | 13.2 | 0.04 | 14.3 | 14.2 | 0.00 |
| 90-94 | 1.3 | 1.2 | 0.02 | 1.3 | 1.3 | 0.00 |
| 95-99 | 0.1 | 0.1 | 0.01 | 0.1 | 0.1 | 0.01 |
| Gender: female | 72.9 | 68.6 | 0.10 | 71.8 | 71.5 | 0.00 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 27.5 | 26.4 | 0.02 | 27.4 | 27.2 | 0.00 |
| Attention deficit hyperactivity disorder | 0.2 | 0.2 | 0.00 | 0.2 | 0.2 | 0.00 |
| Chronic liver disease | 2.1 | 1.9 | 0.02 | 2.1 | 1.8 | 0.02 |
| Chronic obstructive lung disease | 15.8 | 16.0 | -0.01 | 15.7 | 16.0 | -0.01 |
| Crohn's disease | 0.5 | 1.3 | -0.08 | 0.6 | 1.1 | -0.05 |
| Dementia | 2.0 | 1.7 | 0.03 | 2.0 | 1.8 | 0.01 |
| Depressive disorder | 9.2 | 9.2 | 0.00 | 9.2 | 9.2 | 0.00 |
| Diabetes mellitus | 23.1 | 22.6 | 0.01 | 22.9 | 22.7 | 0.00 |
| Gastroesophageal reflux disease | 16.5 | 16.6 | 0.00 | 16.2 | 16.5 | -0.01 |
| Gastrointestinal hemorrhage | 4.8 | 5.1 | -0.01 | 4.8 | 4.9 | -0.01 |
| Human immunodeficiency virus infection | 0.1 | <0.1 | 0.01 | 0.1 | <0.1 | 0.01 |
| Hyperlipidemia | 41.3 | 39.2 | 0.04 | 40.7 | 41.3 | -0.01 |
| Hypertensive disorder | 61.8 | 59.3 | 0.05 | 61.1 | 61.3 | 0.00 |
| Lesion of liver | 1.0 | 1.0 | -0.01 | 1.0 | 1.0 | -0.01 |
| Obesity | 5.6 | 5.4 | 0.01 | 5.5 | 5.4 | 0.01 |
| Osteoarthritis | 62.0 | 59.5 | 0.05 | 61.2 | 61.9 | -0.01 |
| Pneumonia | 9.2 | 9.2 | 0.00 | 9.2 | 9.1 | 0.00 |
| Psoriasis | 2.3 | 4.9 | -0.14 | 2.7 | 3.3 | -0.04 |
| Renal impairment | 11.3 | 10.5 | 0.03 | 11.1 | 11.2 | 0.00 |
| Rheumatoid arthritis | 88.4 | 89.7 | -0.04 | 88.9 | 89.3 | -0.02 |
| Schizophrenia | 0.1 | <0.1 | 0.00 | 0.1 | 0.1 | -0.01 |
| Ulcerative colitis | 0.6 | 2.0 | -0.12 | 0.7 | 1.2 | -0.05 |
| Urinary tract infectious disease | 13.6 | 12.7 | 0.03 | 13.5 | 12.7 | 0.02 |
| Viral hepatitis C | 0.5 | 0.6 | -0.01 | 0.5 | 0.5 | 0.00 |
| Visual system disorder | 55.3 | 55.4 | 0.00 | 55.3 | 55.1 | 0.00 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 10.6 | 9.5 | 0.04 | 10.4 | 10.2 | 0.01 |
| Heart failure | 10.1 | 9.9 | 0.01 | 10.0 | 10.4 | -0.01 |
| Ischemic heart disease | 10.1 | 10.1 | 0.00 | 10.1 | 10.4 | -0.01 |
| Peripheral vascular disease | 6.4 | 5.5 | 0.04 | 6.3 | 6.0 | 0.01 |
| Pulmonary embolism | 1.5 | 1.3 | 0.02 | 1.5 | 1.3 | 0.02 |
| Venous thrombosis | 3.4 | 3.4 | 0.00 | 3.3 | 3.6 | -0.01 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 2.2 | 2.3 | 0.00 | 2.2 | 2.4 | -0.01 |
| Malignant lymphoma | 1.3 | 1.5 | -0.02 | 1.3 | 1.4 | -0.01 |
| Malignant neoplasm of anorectum | 0.4 | 0.4 | 0.00 | 0.4 | 0.4 | 0.00 |
| Malignant neoplastic disease | 18.5 | 19.8 | -0.03 | 18.7 | 19.0 | -0.01 |
| Malignant tumor of breast | 3.8 | 4.0 | -0.01 | 3.8 | 3.8 | 0.00 |
| Malignant tumor of colon | 0.8 | 0.7 | 0.02 | 0.9 | 0.7 | 0.02 |
| Malignant tumor of lung | 0.7 | 0.6 | 0.00 | 0.7 | 0.5 | 0.02 |
| Malignant tumor of urinary bladder | 1.0 | 1.1 | -0.02 | 1.0 | 0.9 | 0.00 |
| Primary malignant neoplasm of prostate | 2.4 | 2.8 | -0.02 | 2.5 | 2.4 | 0.01 |
| Medication use |  |  |  |  |  |  |
| Antibacterials for systemic use | 46.3 | 49.0 | -0.05 | 47.0 | 46.3 | 0.01 |
| Antidepressants | 31.5 | 31.4 | 0.00 | 31.7 | 31.3 | 0.01 |
| Antiepileptics | 20.1 | 21.8 | -0.04 | 20.3 | 20.6 | -0.01 |
| Antiinflammatory and antirheumatic products | 44.0 | 44.4 | -0.01 | 44.1 | 44.8 | -0.02 |
| Antineoplastic agents | 32.1 | 40.3 | -0.17 | 34.8 | 33.3 | 0.03 |
| Antipsoriatics | 1.0 | 1.4 | -0.03 | 1.0 | 1.3 | -0.02 |
| Antithrombotic agents | 22.8 | 22.1 | 0.02 | 22.6 | 22.5 | 0.00 |
| Beta blocking agents | 39.4 | 39.3 | 0.00 | 39.3 | 39.2 | 0.00 |
| Calcium channel blockers | 30.0 | 28.6 | 0.03 | 29.6 | 30.3 | -0.02 |
| Diuretics | 47.1 | 45.2 | 0.04 | 46.7 | 46.2 | 0.01 |
| Drugs for acid related disorders | 44.6 | 45.6 | -0.02 | 44.7 | 45.1 | -0.01 |
| Drugs for obstructive airway diseases | 33.2 | 32.4 | 0.02 | 33.2 | 32.8 | 0.01 |
| Drugs used in diabetes | 17.4 | 16.9 | 0.01 | 17.3 | 16.9 | 0.01 |
| Immunosuppressants | 41.2 | 54.9 | -0.28 | 45.5 | 42.8 | 0.05 |
| Lipid modifying agents | 49.8 | 48.5 | 0.03 | 49.5 | 49.4 | 0.00 |
| Opioids | 43.6 | 44.0 | -0.01 | 43.8 | 43.2 | 0.01 |
| Psycholeptics | 34.6 | 34.1 | 0.01 | 34.5 | 33.6 | 0.02 |
| Psychostimulants, agents used for adhd and nootropics | 2.0 | 2.0 | 0.00 | 2.0 | 1.9 | 0.01 |

## HCQ vs. SSZ: OpenClaims

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ | SSZ |  | HCQ | SSZ |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 15-19 | 0.3 | 0.3 | -0.01 | 0.3 | 0.3 | 0.00 |
| 20-24 | 1.2 | 1.2 | -0.01 | 1.2 | 1.2 | 0.00 |
| 25-29 | 1.9 | 1.9 | 0.00 | 1.9 | 1.8 | 0.00 |
| 30-34 | 3.0 | 2.9 | 0.00 | 2.9 | 2.9 | 0.00 |
| 35-39 | 4.3 | 4.4 | -0.01 | 4.3 | 4.3 | 0.00 |
| 40-44 | 5.8 | 5.9 | 0.00 | 5.8 | 5.7 | 0.00 |
| 45-49 | 8.3 | 8.3 | 0.00 | 8.2 | 8.1 | 0.00 |
| 50-54 | 11.5 | 11.9 | -0.01 | 11.5 | 11.5 | 0.00 |
| 55-59 | 13.6 | 14.2 | -0.02 | 13.7 | 13.8 | 0.00 |
| 60-64 | 13.4 | 13.8 | -0.01 | 13.6 | 13.5 | 0.00 |
| 70-74 | 9.9 | 9.6 | 0.01 | 9.9 | 10.0 | 0.00 |
| 75-79 | 10.7 | 9.0 | 0.06 | 10.3 | 10.6 | -0.01 |
| 80-84 | 3.7 | 3.5 | 0.01 | 3.6 | 3.6 | 0.00 |
| 85-89 | 0.2 | 0.2 | 0.00 | 0.2 | 0.2 | 0.00 |
| Gender: female | 81.0 | 73.5 | 0.18 | 79.3 | 79.1 | 0.00 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 20.1 | 19.2 | 0.02 | 19.9 | 19.9 | 0.00 |
| Chronic liver disease | 2.1 | 2.0 | 0.00 | 2.0 | 2.1 | 0.00 |
| Chronic obstructive lung disease | 7.6 | 7.7 | 0.00 | 7.6 | 7.8 | 0.00 |
| Crohn's disease | 0.4 | 1.6 | -0.11 | 0.5 | 0.9 | -0.04 |
| Dementia | 0.8 | 0.7 | 0.01 | 0.8 | 0.8 | 0.00 |
| Depressive disorder | 9.7 | 9.6 | 0.00 | 9.6 | 9.8 | -0.01 |
| Diabetes mellitus | 15.6 | 16.1 | -0.01 | 15.7 | 16.0 | -0.01 |
| Gastrointestinal hemorrhage | 2.4 | 2.5 | -0.01 | 2.4 | 2.4 | 0.00 |
| Hyperlipidemia | 26.0 | 25.8 | 0.01 | 26.0 | 26.4 | -0.01 |
| Hypertensive disorder | 35.0 | 34.5 | 0.01 | 34.9 | 35.2 | -0.01 |
| Lesion of liver | 0.8 | 0.7 | 0.01 | 0.8 | 0.8 | 0.00 |
| Obesity | 6.3 | 6.6 | -0.01 | 6.4 | 6.5 | 0.00 |
| Osteoarthritis | 36.0 | 37.0 | -0.02 | 36.1 | 36.8 | -0.02 |
| Psoriasis | 1.9 | 5.4 | -0.19 | 2.2 | 3.3 | -0.06 |
| Renal impairment | 6.2 | 5.5 | 0.03 | 6.1 | 6.0 | 0.00 |
| Rheumatoid arthritis | 69.0 | 69.6 | -0.01 | 69.3 | 69.8 | -0.01 |
| Schizophrenia | 0.2 | 0.2 | 0.00 | 0.2 | 0.2 | 0.00 |
| Ulcerative colitis | 0.4 | 1.7 | -0.12 | 0.5 | 1.0 | -0.06 |
| Viral hepatitis C | 1.1 | 1.1 | 0.00 | 1.1 | 1.1 | 0.00 |
| Visual system disorder | 21.9 | 20.7 | 0.03 | 21.6 | 21.6 | 0.00 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 3.6 | 3.4 | 0.01 | 3.6 | 3.6 | 0.00 |
| Cerebrovascular disease | 3.4 | 2.8 | 0.03 | 3.2 | 3.3 | 0.00 |
| Coronary arteriosclerosis | 6.8 | 6.8 | 0.00 | 6.8 | 6.9 | 0.00 |
| Heart disease | 18.3 | 17.3 | 0.03 | 18.1 | 18.3 | 0.00 |
| Heart failure | 4.0 | 3.7 | 0.02 | 3.9 | 4.0 | 0.00 |
| Ischemic heart disease | 3.5 | 3.4 | 0.01 | 3.5 | 3.6 | 0.00 |
| Peripheral vascular disease | 9.7 | 9.1 | 0.02 | 9.6 | 9.6 | 0.00 |
| Venous thrombosis | 1.5 | 1.4 | 0.01 | 1.5 | 1.5 | 0.00 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 0.9 | 0.9 | 0.00 | 0.9 | 1.0 | 0.00 |
| Malignant neoplasm of anorectum | 0.1 | 0.1 | 0.00 | 0.1 | 0.1 | 0.00 |
| Malignant neoplastic disease | 7.2 | 7.2 | 0.00 | 7.2 | 7.3 | 0.00 |
| Malignant tumor of breast | 1.8 | 1.6 | 0.01 | 1.7 | 1.7 | 0.00 |
| Malignant tumor of lung | 0.3 | 0.3 | 0.00 | 0.3 | 0.3 | 0.00 |
| Malignant tumor of urinary bladder | 0.2 | 0.3 | -0.01 | 0.3 | 0.3 | 0.00 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 30.8 | 33.0 | -0.05 | 31.4 | 31.4 | 0.00 |
| Antibacterials for systemic use | 36.1 | 38.8 | -0.06 | 36.8 | 36.6 | 0.00 |
| Antidepressants | 34.5 | 35.7 | -0.03 | 34.7 | 34.8 | 0.00 |
| Antiepileptics | 24.0 | 26.4 | -0.05 | 24.5 | 24.6 | 0.00 |
| Antiinflammatory and antirheumatic products | 41.0 | 45.2 | -0.08 | 42.0 | 41.9 | 0.00 |
| Antineoplastic agents | 31.6 | 38.0 | -0.14 | 33.3 | 33.4 | 0.00 |
| Antipsoriatics | 0.7 | 1.0 | -0.03 | 0.8 | 0.9 | -0.01 |
| Beta blocking agents | 23.1 | 24.1 | -0.02 | 23.3 | 23.5 | 0.00 |
| Drugs used in diabetes | 14.0 | 15.4 | -0.04 | 14.3 | 14.6 | -0.01 |
| Immunosuppressants | 41.9 | 53.4 | -0.23 | 44.7 | 44.7 | 0.00 |
| Lipid modifying agents | 29.0 | 31.5 | -0.05 | 29.6 | 29.8 | 0.00 |
| Opioids | 34.8 | 37.8 | -0.06 | 35.4 | 35.5 | 0.00 |
| Psycholeptics | 29.5 | 30.8 | -0.03 | 29.7 | 29.9 | 0.00 |
| Psychostimulants, agents used for adhd and nootropics | 4.5 | 4.8 | -0.01 | 4.5 | 4.6 | 0.00 |

## HCQ vs. SSZ: Optum

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ | SSZ |  | HCQ | SSZ |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 15-19 | 0.3 | 0.4 | -0.01 | 0.3 | 0.4 | -0.02 |
| 20-24 | 1.1 | 1.1 | -0.01 | 1.1 | 1.1 | -0.01 |
| 25-29 | 1.8 | 2.0 | -0.01 | 1.8 | 1.8 | 0.00 |
| 30-34 | 3.4 | 3.2 | 0.01 | 3.3 | 3.3 | 0.00 |
| 35-39 | 4.9 | 5.2 | -0.02 | 4.9 | 4.8 | 0.00 |
| 40-44 | 6.8 | 6.7 | 0.01 | 6.8 | 6.5 | 0.01 |
| 45-49 | 8.9 | 9.1 | 0.00 | 8.9 | 8.9 | 0.00 |
| 50-54 | 11.6 | 11.6 | 0.00 | 11.6 | 11.7 | 0.00 |
| 55-59 | 12.5 | 13.3 | -0.02 | 12.7 | 12.8 | 0.00 |
| 60-64 | 11.6 | 12.6 | -0.03 | 11.9 | 11.9 | 0.00 |
| 65-69 | 11.3 | 12.2 | -0.03 | 11.6 | 11.7 | 0.00 |
| 70-74 | 10.8 | 10.6 | 0.01 | 10.9 | 10.6 | 0.01 |
| 75-79 | 7.9 | 6.9 | 0.04 | 7.7 | 7.7 | 0.00 |
| 80-84 | 5.0 | 3.8 | 0.06 | 4.7 | 4.9 | -0.01 |
| 85-89 | 1.9 | 1.3 | 0.05 | 1.8 | 1.7 | 0.01 |
| Gender: female | 79.6 | 71.9 | 0.18 | 77.6 | 77.6 | 0.00 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 34.7 | 33.2 | 0.03 | 34.2 | 34.2 | 0.00 |
| Attention deficit hyperactivity disorder | 1.2 | 1.1 | 0.00 | 1.2 | 1.1 | 0.00 |
| Chronic liver disease | 3.7 | 3.8 | -0.01 | 3.7 | 3.9 | -0.01 |
| Chronic obstructive lung disease | 11.2 | 10.9 | 0.01 | 11.1 | 11.2 | 0.00 |
| Crohn's disease | 0.7 | 2.4 | -0.14 | 0.9 | 1.4 | -0.05 |
| Dementia | 1.3 | 1.2 | 0.01 | 1.2 | 1.5 | -0.02 |
| Depressive disorder | 18.5 | 18.1 | 0.01 | 18.4 | 18.2 | 0.00 |
| Diabetes mellitus | 20.9 | 20.2 | 0.02 | 20.7 | 21.1 | -0.01 |
| Gastroesophageal reflux disease | 21.6 | 21.1 | 0.01 | 21.5 | 21.8 | -0.01 |
| Gastrointestinal hemorrhage | 4.0 | 4.5 | -0.02 | 4.0 | 4.1 | 0.00 |
| Human immunodeficiency virus infection | 0.2 | 0.2 | -0.01 | 0.2 | 0.2 | -0.01 |
| Hyperlipidemia | 46.8 | 45.3 | 0.03 | 46.4 | 47.1 | -0.01 |
| Hypertensive disorder | 51.4 | 51.0 | 0.01 | 51.2 | 51.9 | -0.01 |
| Lesion of liver | 1.3 | 1.2 | 0.00 | 1.3 | 1.3 | 0.00 |
| Obesity | 12.2 | 12.5 | -0.01 | 12.2 | 12.2 | 0.00 |
| Osteoarthritis | 56.4 | 55.4 | 0.02 | 56.1 | 56.7 | -0.01 |
| Pneumonia | 6.5 | 5.8 | 0.03 | 6.3 | 6.4 | 0.00 |
| Psoriasis | 3.2 | 8.0 | -0.21 | 3.9 | 4.9 | -0.05 |
| Renal impairment | 9.9 | 9.2 | 0.03 | 9.7 | 9.9 | 0.00 |
| Rheumatoid arthritis | 84.3 | 85.5 | -0.04 | 84.8 | 85.2 | -0.01 |
| Schizophrenia | 0.2 | 0.1 | 0.01 | 0.2 | 0.1 | 0.01 |
| Ulcerative colitis | 0.7 | 2.2 | -0.13 | 0.9 | 1.3 | -0.04 |
| Viral hepatitis C | 1.5 | 1.7 | -0.02 | 1.5 | 1.7 | -0.02 |
| Visual system disorder | 40.3 | 39.7 | 0.01 | 40.0 | 39.8 | 0.00 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 5.1 | 4.1 | 0.04 | 4.8 | 4.8 | 0.00 |
| Cerebrovascular disease | 6.3 | 5.5 | 0.03 | 6.1 | 6.0 | 0.00 |
| Coronary arteriosclerosis | 10.8 | 10.5 | 0.01 | 10.7 | 11.0 | -0.01 |
| Heart disease | 27.8 | 26.1 | 0.04 | 27.3 | 27.9 | -0.01 |
| Heart failure | 6.3 | 5.8 | 0.02 | 6.1 | 6.4 | -0.01 |
| Ischemic heart disease | 6.5 | 6.4 | 0.01 | 6.5 | 6.6 | -0.01 |
| Peripheral vascular disease | 4.7 | 4.3 | 0.02 | 4.7 | 4.6 | 0.00 |
| Pulmonary embolism | 1.2 | 0.9 | 0.03 | 1.2 | 1.1 | 0.01 |
| Venous thrombosis | 2.3 | 2.1 | 0.02 | 2.2 | 2.4 | -0.01 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 1.4 | 1.2 | 0.02 | 1.4 | 1.3 | 0.01 |
| Malignant lymphoma | 0.7 | 0.8 | -0.01 | 0.7 | 0.8 | -0.01 |
| Malignant neoplasm of anorectum | 0.2 | 0.3 | -0.02 | 0.2 | 0.2 | -0.02 |
| Malignant neoplastic disease | 10.4 | 10.4 | 0.00 | 10.4 | 10.6 | -0.01 |
| Malignant tumor of breast | 2.5 | 2.0 | 0.04 | 2.4 | 2.4 | 0.00 |
| Malignant tumor of colon | 0.4 | 0.5 | -0.01 | 0.4 | 0.5 | -0.01 |
| Malignant tumor of lung | 0.4 | 0.4 | 0.01 | 0.4 | 0.4 | 0.01 |
| Malignant tumor of urinary bladder | 0.3 | 0.4 | -0.01 | 0.3 | 0.3 | 0.00 |
| Primary malignant neoplasm of prostate | 1.0 | 1.2 | -0.02 | 1.0 | 1.0 | 0.00 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 32.3 | 32.6 | -0.01 | 32.4 | 32.7 | -0.01 |
| Antibacterials for systemic use | 41.2 | 41.9 | -0.01 | 41.3 | 41.1 | 0.00 |
| Antidepressants | 35.1 | 35.2 | 0.00 | 35.0 | 34.9 | 0.00 |
| Antiinflammatory and antirheumatic products | 47.9 | 50.1 | -0.04 | 48.5 | 49.0 | -0.01 |
| Antineoplastic agents | 29.8 | 38.5 | -0.18 | 32.6 | 32.2 | 0.01 |
| Antipsoriatics | 0.9 | 1.1 | -0.03 | 0.9 | 0.9 | 0.00 |
| Antithrombotic agents | 11.8 | 10.6 | 0.04 | 11.5 | 11.4 | 0.00 |
| Beta blocking agents | 23.2 | 22.4 | 0.02 | 23.1 | 23.2 | 0.00 |
| Calcium channel blockers | 17.8 | 16.6 | 0.03 | 17.6 | 17.8 | 0.00 |
| Diuretics | 30.3 | 29.0 | 0.03 | 30.0 | 30.7 | -0.02 |
| Drugs for acid related disorders | 33.7 | 34.4 | -0.02 | 33.8 | 34.4 | -0.01 |
| Drugs for obstructive airway diseases | 29.4 | 28.9 | 0.01 | 29.2 | 29.5 | 0.00 |
| Drugs used in diabetes | 14.1 | 14.1 | 0.00 | 14.1 | 14.5 | -0.01 |
| Immunosuppressants | 38.7 | 53.1 | -0.29 | 43.0 | 42.2 | 0.02 |
| Lipid modifying agents | 31.9 | 32.1 | 0.00 | 32.0 | 32.6 | -0.01 |
| Opioids | 38.4 | 40.2 | -0.04 | 38.8 | 38.9 | 0.00 |
| Psycholeptics | 30.4 | 29.3 | 0.02 | 30.1 | 29.9 | 0.00 |
| Psychostimulants, agents used for adhd and nootropics | 4.0 | 3.7 | 0.02 | 4.0 | 3.7 | 0.01 |

## HCQ vs. SSZ: PanTher

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ | SSZ |  | HCQ | SSZ |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 15-19 | 0.2 | 0.3 | -0.02 | 0.2 | 0.3 | -0.01 |
| 20-24 | 1.0 | 1.0 | 0.00 | 1.0 | 1.0 | 0.00 |
| 25-29 | 1.8 | 1.9 | -0.01 | 1.8 | 1.9 | -0.01 |
| 30-34 | 3.1 | 3.0 | 0.00 | 3.1 | 3.0 | 0.00 |
| 35-39 | 4.2 | 4.6 | -0.02 | 4.2 | 4.2 | 0.00 |
| 40-44 | 5.9 | 5.8 | 0.01 | 5.9 | 5.6 | 0.01 |
| 45-49 | 7.9 | 8.2 | -0.01 | 7.9 | 7.9 | 0.00 |
| 50-54 | 11.5 | 11.9 | -0.01 | 11.6 | 11.5 | 0.00 |
| 55-59 | 13.8 | 14.7 | -0.03 | 14.0 | 14.3 | -0.01 |
| 60-64 | 13.3 | 13.9 | -0.02 | 13.5 | 13.4 | 0.00 |
| 65-69 | 12.1 | 12.7 | -0.02 | 12.3 | 12.6 | -0.01 |
| 70-74 | 10.1 | 9.6 | 0.02 | 10.0 | 9.9 | 0.00 |
| 75-79 | 8.1 | 6.9 | 0.04 | 7.8 | 7.9 | 0.00 |
| 80-84 | 5.5 | 4.2 | 0.06 | 5.2 | 5.3 | -0.01 |
| 85-89 | 1.6 | 1.2 | 0.03 | 1.5 | 1.4 | 0.00 |
| Gender: female | 80.1 | 72.4 | 0.18 | 78.2 | 78.6 | -0.01 |
| Race |  |  |  |  |  |  |
| race = Asian | 1.5 | 1.1 | 0.04 | 1.5 | 1.4 | 0.01 |
| race = Black or African American | 10.1 | 8.4 | 0.06 | 9.7 | 9.6 | 0.00 |
| race = White | 81.4 | 83.3 | -0.05 | 81.8 | 81.9 | 0.00 |
| Ethnicity |  |  |  |  |  |  |
| ethnicity = Hispanic or Latino | 5.3 | 6.1 | -0.04 | 5.4 | 5.4 | 0.00 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 17.9 | 18.3 | -0.01 | 17.9 | 18.1 | 0.00 |
| Attention deficit hyperactivity disorder | 1.0 | 0.8 | 0.01 | 0.9 | 0.8 | 0.01 |
| Chronic liver disease | 2.7 | 3.0 | -0.02 | 2.8 | 2.9 | -0.01 |
| Chronic obstructive lung disease | 8.5 | 9.2 | -0.03 | 8.6 | 8.9 | -0.01 |
| Crohn's disease | 0.5 | 1.6 | -0.12 | 0.6 | 0.9 | -0.04 |
| Dementia | 1.1 | 0.9 | 0.02 | 1.0 | 1.1 | -0.01 |
| Depressive disorder | 15.7 | 15.4 | 0.01 | 15.6 | 15.7 | 0.00 |
| Diabetes mellitus | 14.9 | 15.0 | 0.00 | 15.0 | 15.3 | -0.01 |
| Gastroesophageal reflux disease | 18.4 | 18.1 | 0.01 | 18.3 | 18.1 | 0.00 |
| Gastrointestinal hemorrhage | 2.1 | 2.4 | -0.02 | 2.1 | 2.2 | 0.00 |
| Human immunodeficiency virus infection | 0.1 | 0.2 | -0.01 | 0.1 | 0.2 | -0.01 |
| Hyperlipidemia | 30.4 | 31.1 | -0.02 | 30.5 | 30.6 | 0.00 |
| Hypertensive disorder | 38.9 | 38.6 | 0.01 | 38.8 | 39.2 | -0.01 |
| Lesion of liver | 1.1 | 0.9 | 0.02 | 1.0 | 1.0 | 0.01 |
| Obesity | 11.3 | 12.1 | -0.03 | 11.4 | 11.6 | -0.01 |
| Osteoarthritis | 35.1 | 36.2 | -0.02 | 35.3 | 35.7 | -0.01 |
| Pneumonia | 5.0 | 5.1 | 0.00 | 5.0 | 5.0 | 0.00 |
| Psoriasis | 1.7 | 4.4 | -0.16 | 2.1 | 2.7 | -0.04 |
| Renal impairment | 7.7 | 6.7 | 0.04 | 7.4 | 7.7 | -0.01 |
| Rheumatoid arthritis | 84.8 | 84.7 | 0.00 | 84.9 | 85.5 | -0.02 |
| Ulcerative colitis | 0.4 | 1.5 | -0.11 | 0.5 | 0.8 | -0.04 |
| Urinary tract infectious disease | 7.6 | 6.3 | 0.05 | 7.2 | 7.1 | 0.00 |
| Viral hepatitis C | 1.2 | 1.5 | -0.02 | 1.3 | 1.4 | -0.01 |
| Visual system disorder | 13.8 | 13.6 | 0.00 | 13.7 | 13.4 | 0.01 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Coronary arteriosclerosis | 8.3 | 8.5 | 0.00 | 8.3 | 8.5 | -0.01 |
| Heart disease | 20.9 | 20.2 | 0.02 | 20.7 | 21.1 | -0.01 |
| Heart failure | 4.7 | 4.4 | 0.02 | 4.7 | 4.9 | -0.01 |
| Ischemic heart disease | 4.4 | 4.5 | 0.00 | 4.4 | 4.5 | 0.00 |
| Peripheral vascular disease | 2.6 | 2.4 | 0.01 | 2.6 | 2.5 | 0.00 |
| Pulmonary embolism | 1.0 | 1.0 | 0.00 | 1.0 | 1.0 | -0.01 |
| Venous thrombosis | 1.9 | 2.0 | -0.01 | 1.9 | 2.0 | -0.01 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 1.1 | 1.2 | -0.01 | 1.1 | 1.2 | -0.01 |
| Malignant lymphoma | 0.6 | 0.7 | -0.01 | 0.6 | 0.7 | 0.00 |
| Malignant neoplasm of anorectum | 0.2 | 0.2 | 0.01 | 0.2 | 0.2 | 0.01 |
| Malignant neoplastic disease | 8.5 | 8.8 | -0.01 | 8.5 | 8.8 | -0.01 |
| Malignant tumor of breast | 1.9 | 1.7 | 0.02 | 1.9 | 1.9 | 0.00 |
| Malignant tumor of colon | 0.4 | 0.3 | 0.00 | 0.4 | 0.4 | 0.00 |
| Malignant tumor of lung | 0.4 | 0.4 | -0.01 | 0.4 | 0.4 | -0.01 |
| Malignant tumor of urinary bladder | 0.2 | 0.4 | -0.03 | 0.2 | 0.3 | -0.02 |
| Primary malignant neoplasm of prostate | 0.6 | 0.8 | -0.03 | 0.7 | 0.7 | 0.00 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 30.6 | 31.6 | -0.02 | 30.8 | 31.3 | -0.01 |
| Antibacterials for systemic use | 28.1 | 29.8 | -0.04 | 28.3 | 28.2 | 0.00 |
| Antidepressants | 36.0 | 35.6 | 0.01 | 35.8 | 36.3 | -0.01 |
| Antiepileptics | 24.0 | 24.8 | -0.02 | 24.2 | 24.4 | -0.01 |
| Antiinflammatory and antirheumatic products | 43.7 | 47.2 | -0.07 | 44.5 | 44.6 | 0.00 |
| Antineoplastic agents | 34.4 | 38.1 | -0.08 | 35.4 | 36.4 | -0.02 |
| Antipsoriatics | 0.6 | 0.7 | -0.01 | 0.6 | 0.6 | 0.00 |
| Antithrombotic agents | 33.0 | 31.7 | 0.03 | 32.6 | 33.2 | -0.01 |
| Beta blocking agents | 26.7 | 27.0 | -0.01 | 26.8 | 27.2 | -0.01 |
| Calcium channel blockers | 17.2 | 16.7 | 0.01 | 17.1 | 17.5 | -0.01 |
| Diuretics | 29.2 | 28.3 | 0.02 | 29.1 | 29.4 | -0.01 |
| Drugs for acid related disorders | 45.1 | 45.5 | -0.01 | 45.1 | 45.4 | 0.00 |
| Drugs for obstructive airway diseases | 34.5 | 35.2 | -0.02 | 34.6 | 35.0 | -0.01 |
| Drugs used in diabetes | 15.1 | 15.7 | -0.02 | 15.3 | 15.8 | -0.01 |
| Immunosuppressants | 47.1 | 56.1 | -0.18 | 49.2 | 50.2 | -0.02 |
| Lipid modifying agents | 30.2 | 31.7 | -0.03 | 30.6 | 31.0 | -0.01 |
| Opioids | 39.3 | 41.1 | -0.04 | 39.6 | 40.3 | -0.01 |
| Psycholeptics | 35.2 | 35.0 | 0.00 | 35.1 | 35.5 | -0.01 |
| Psychostimulants, agents used for adhd and nootropics | 4.3 | 4.0 | 0.01 | 4.2 | 4.1 | 0.01 |

## HCQ vs. SSZ: SIDIAP

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ | SSZ |  | HCQ | SSZ |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 20-24 | 0.6 | <1.3 | -0.02 | 0.6 | <1.0 | -0.02 |
| 25-29 | 2.2 | 2.9 | -0.05 | 2.0 | 4.6 | -0.15 |
| 30-34 | 4.4 | 4.7 | -0.02 | 4.6 | 4.3 | 0.01 |
| 35-39 | 7.1 | 9.7 | -0.09 | 7.2 | 13.3 | -0.20 |
| 40-44 | 8.0 | 6.8 | 0.05 | 8.3 | 5.6 | 0.11 |
| 45-49 | 7.5 | 9.4 | -0.07 | 7.4 | 7.3 | 0.00 |
| 50-54 | 10.1 | 12.3 | -0.07 | 10.5 | 7.7 | 0.10 |
| 55-59 | 11.5 | 9.4 | 0.07 | 11.5 | 9.5 | 0.06 |
| 60-64 | 11.2 | 10.8 | 0.02 | 10.9 | 11.1 | -0.01 |
| 65-69 | 10.8 | 10.2 | 0.02 | 11.1 | 8.7 | 0.08 |
| 70-74 | 9.9 | 6.8 | 0.11 | 9.6 | 9.6 | 0.00 |
| 75-79 | 7.5 | 9.4 | -0.07 | 7.6 | 9.1 | -0.05 |
| 80-84 | 6.2 | 5.8 | 0.02 | 6.0 | 8.0 | -0.08 |
| 85-89 | 2.0 | <1.3 | 0.13 | 2.0 | <1.0 | 0.16 |
| 90-94 | 0.6 | <1.3 | 0.06 | 0.6 | <1.0 | 0.06 |
| Gender: female | 79.2 | 66.7 | 0.29 | 75.9 | 79.8 | -0.09 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 17.9 | 17.3 | 0.02 | 17.4 | 26.6 | -0.22 |
| Chronic liver disease | 1.0 | <1.3 | -0.01 | 1.0 | <1.0 | 0.04 |
| Chronic obstructive lung disease | 2.6 | 2.6 | 0.00 | 2.4 | 1.7 | 0.05 |
| Depressive disorder | 3.0 | 4.7 | -0.09 | 3.1 | 9.0 | -0.25 |
| Diabetes mellitus | 2.9 | 3.1 | -0.02 | 2.8 | 2.3 | 0.03 |
| Gastroesophageal reflux disease | 1.0 | 1.3 | -0.02 | 1.1 | 1.5 | -0.04 |
| Gastrointestinal hemorrhage | 2.7 | 3.7 | -0.05 | 2.9 | 3.6 | -0.04 |
| Hyperlipidemia | 4.3 | 3.4 | 0.04 | 4.0 | 7.8 | -0.16 |
| Hypertensive disorder | 5.3 | 6.6 | -0.05 | 5.7 | 7.9 | -0.09 |
| Obesity | 4.8 | 4.2 | 0.03 | 4.6 | 3.3 | 0.07 |
| Osteoarthritis | 3.0 | 3.1 | -0.01 | 3.2 | 4.9 | -0.09 |
| Pneumonia | 2.0 | 2.4 | -0.02 | 2.2 | 7.3 | -0.24 |
| Psoriasis | 0.7 | 2.1 | -0.12 | 0.6 | 2.0 | -0.12 |
| Renal impairment | 1.8 | 2.4 | -0.04 | 2.0 | 2.1 | -0.01 |
| Rheumatoid arthritis | 35.6 | 26.5 | 0.20 | 33.2 | 42.3 | -0.19 |
| Urinary tract infectious disease | 7.5 | 5.8 | 0.07 | 7.4 | 6.0 | 0.06 |
| Viral hepatitis C | 0.9 | <1.3 | 0.04 | 0.9 | <1.0 | 0.07 |
| Visual system disorder | 16.0 | 17.3 | -0.03 | 15.6 | 19.5 | -0.10 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 0.6 | 1.3 | -0.08 | 0.5 | 4.1 | -0.24 |
| Cerebrovascular disease | 2.2 | <1.3 | 0.09 | 2.2 | <1.0 | 0.13 |
| Heart disease | 7.2 | 6.8 | 0.02 | 7.0 | 9.2 | -0.08 |
| Heart failure | 1.1 | <1.3 | 0.01 | 1.1 | 3.3 | -0.15 |
| Ischemic heart disease | 1.6 | <1.3 | 0.10 | 1.5 | <1.0 | 0.13 |
| Peripheral vascular disease | 3.6 | 2.4 | 0.07 | 3.8 | 1.7 | 0.13 |
| Pulmonary embolism | 0.4 | <1.3 | 0.02 | 0.4 | <1.0 | 0.04 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | <0.4 | <1.3 | -0.08 | <0.4 | <1.0 | -0.06 |
| Malignant neoplastic disease | 3.0 | 3.4 | -0.02 | 3.0 | 2.4 | 0.04 |
| Malignant tumor of breast | 0.4 | <1.3 | -0.02 | <0.4 | <1.0 | -0.02 |
| Malignant tumor of colon | <0.4 | <1.3 | 0.01 | <0.4 | <1.0 | 0.04 |
| Malignant tumor of lung | <0.4 | <1.3 | -0.04 | <0.4 | <1.0 | -0.03 |
| Malignant tumor of urinary bladder | <0.4 | <1.3 | -0.05 | <0.4 | <1.0 | -0.02 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 26.2 | 30.7 | -0.10 | 27.2 | 27.0 | 0.00 |
| Antibacterials for systemic use | 17.4 | 17.8 | -0.01 | 17.1 | 19.2 | -0.05 |
| Antidepressants | 21.9 | 22.8 | -0.02 | 21.9 | 27.7 | -0.13 |
| Antiepileptics | 9.9 | 11.8 | -0.06 | 9.9 | 11.9 | -0.06 |
| Antiinflammatory and antirheumatic products | 70.0 | 71.7 | -0.04 | 69.8 | 68.2 | 0.03 |
| Antineoplastic agents | 21.3 | 21.0 | 0.01 | 21.3 | 20.6 | 0.02 |
| Antipsoriatics | 1.3 | 1.6 | -0.02 | 1.4 | <1.0 | 0.04 |
| Antithrombotic agents | 17.4 | 16.3 | 0.03 | 17.3 | 15.6 | 0.05 |
| Beta blocking agents | 11.2 | 10.5 | 0.02 | 11.5 | 10.1 | 0.04 |
| Calcium channel blockers | 10.3 | 6.0 | 0.16 | 9.8 | 9.7 | 0.00 |
| Diuretics | 22.9 | 21.8 | 0.03 | 22.6 | 19.2 | 0.08 |
| Drugs for acid related disorders | 77.9 | 83.5 | -0.14 | 78.8 | 78.0 | 0.02 |
| Drugs for obstructive airway diseases | 24.7 | 25.5 | -0.02 | 24.2 | 21.1 | 0.07 |
| Drugs used in diabetes | 10.5 | 10.8 | -0.01 | 10.6 | 9.2 | 0.05 |
| Immunosuppressants | 32.6 | 36.2 | -0.08 | 33.1 | 30.3 | 0.06 |
| Lipid modifying agents | 25.3 | 21.5 | 0.09 | 24.5 | 23.3 | 0.03 |
| Opioids | 22.6 | 23.4 | -0.02 | 22.9 | 23.5 | -0.01 |
| Psycholeptics | 36.3 | 40.7 | -0.09 | 37.1 | 44.2 | -0.14 |
| Psychostimulants, agents used for adhd and nootropics | 1.3 | 3.1 | -0.13 | 1.3 | 2.0 | -0.05 |

## HCQ vs. SSZ: VA

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ | SSZ |  | HCQ | SSZ |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 20-24 | 0.1 | 0.1 | 0.00 | 0.1 | 0.2 | -0.02 |
| 25-29 | 0.6 | 0.6 | 0.00 | 0.6 | 0.6 | -0.01 |
| 30-34 | 1.2 | 1.0 | 0.02 | 1.1 | 1.1 | 0.00 |
| 35-39 | 1.6 | 1.7 | 0.00 | 1.5 | 1.7 | -0.02 |
| 40-44 | 2.7 | 3.0 | -0.02 | 2.7 | 2.8 | -0.01 |
| 45-49 | 5.1 | 5.1 | 0.00 | 5.1 | 5.0 | 0.00 |
| 50-54 | 8.4 | 9.7 | -0.05 | 8.8 | 8.7 | 0.00 |
| 55-59 | 12.8 | 14.5 | -0.05 | 13.4 | 13.1 | 0.01 |
| 60-64 | 17.1 | 17.8 | -0.02 | 17.3 | 17.6 | -0.01 |
| 65-69 | 16.9 | 17.0 | 0.00 | 17.1 | 17.0 | 0.00 |
| 70-74 | 13.8 | 13.7 | 0.00 | 13.9 | 13.7 | 0.00 |
| 75-79 | 10.0 | 9.1 | 0.03 | 9.8 | 9.7 | 0.00 |
| 80-84 | 6.5 | 4.7 | 0.08 | 5.9 | 6.2 | -0.01 |
| 85-89 | 2.5 | 1.6 | 0.06 | 2.2 | 2.2 | 0.00 |
| 90-94 | 0.5 | 0.3 | 0.03 | 0.5 | 0.3 | 0.03 |
| Gender: female | 14.5 | 10.4 | 0.13 | 13.2 | 13.1 | 0.00 |
| Race |  |  |  |  |  |  |
| race = Asian | 0.5 | 0.4 | 0.00 | 0.5 | 0.4 | 0.01 |
| race = Black or African American | 14.4 | 12.9 | 0.04 | 13.9 | 13.6 | 0.01 |
| race = White | 73.6 | 74.6 | -0.02 | 73.9 | 74.1 | 0.00 |
| race = Unknown | 9.9 | 10.4 | -0.02 | 10.1 | 10.2 | 0.00 |
| race = Native Hawaiian or Other Pacific Islander | 0.7 | 0.8 | -0.01 | 0.7 | 0.8 | -0.02 |
| race = American Indian or Alaska Native | 0.9 | 0.9 | 0.00 | 0.9 | 0.8 | 0.01 |
| Ethnicity |  |  |  |  |  |  |
| ethnicity = Hispanic or Latino | 4.8 | 4.9 | 0.00 | 4.9 | 4.7 | 0.00 |
| ethnicity = Not Hispanic or Latino | 89.3 | 88.6 | 0.02 | 89.0 | 89.1 | 0.00 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 11.4 | 12.3 | -0.03 | 11.8 | 11.3 | 0.02 |
| Attention deficit hyperactivity disorder | 0.4 | 0.4 | 0.00 | 0.4 | 0.5 | -0.01 |
| Chronic liver disease | 3.4 | 3.4 | 0.00 | 3.5 | 3.6 | 0.00 |
| Crohn's disease | 0.3 | 0.9 | -0.07 | 0.4 | 0.6 | -0.02 |
| Dementia | 1.2 | 1.0 | 0.02 | 1.1 | 1.1 | 0.00 |
| Depressive disorder | 21.9 | 21.6 | 0.01 | 21.8 | 21.6 | 0.00 |
| Diabetes mellitus | 24.5 | 23.8 | 0.02 | 24.1 | 24.1 | 0.00 |
| Gastroesophageal reflux disease | 5.8 | 5.4 | 0.01 | 5.6 | 5.5 | 0.01 |
| Gastrointestinal hemorrhage | 2.1 | 2.8 | -0.04 | 2.3 | 2.3 | 0.00 |
| Human immunodeficiency virus infection | 0.2 | 0.2 | 0.00 | 0.2 | 0.2 | 0.00 |
| Hypertensive disorder | 58.1 | 57.6 | 0.01 | 58.0 | 58.0 | 0.00 |
| Lesion of liver | 1.4 | 1.4 | 0.00 | 1.4 | 1.4 | 0.01 |
| Obesity | 14.3 | 14.3 | 0.00 | 14.2 | 14.3 | 0.00 |
| Psoriasis | 2.2 | 7.0 | -0.23 | 3.2 | 4.1 | -0.05 |
| Renal impairment | 7.2 | 6.6 | 0.02 | 7.0 | 7.1 | 0.00 |
| Rheumatoid arthritis | 90.4 | 89.6 | 0.02 | 90.5 | 90.2 | 0.01 |
| Schizophrenia | 0.6 | 0.7 | -0.01 | 0.6 | 0.6 | 0.01 |
| Ulcerative colitis | 0.4 | 1.0 | -0.06 | 0.5 | 0.7 | -0.02 |
| Urinary tract infectious disease | 3.5 | 3.1 | 0.02 | 3.4 | 3.1 | 0.02 |
| Viral hepatitis C | 3.7 | 3.7 | 0.00 | 3.7 | 3.8 | 0.00 |
| Visual system disorder | 38.5 | 41.9 | -0.07 | 39.5 | 38.7 | 0.02 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 6.1 | 5.4 | 0.03 | 5.9 | 5.8 | 0.00 |
| Cerebrovascular disease | 4.3 | 4.0 | 0.02 | 4.3 | 4.3 | 0.00 |
| Coronary arteriosclerosis | 14.7 | 15.1 | -0.01 | 14.8 | 15.2 | -0.01 |
| Heart disease | 30.5 | 30.4 | 0.00 | 30.6 | 31.1 | -0.01 |
| Heart failure | 5.9 | 6.1 | -0.01 | 5.9 | 6.1 | -0.01 |
| Ischemic heart disease | 11.0 | 11.2 | 0.00 | 11.1 | 11.1 | 0.00 |
| Pulmonary embolism | 0.7 | 0.8 | 0.00 | 0.7 | 0.8 | -0.01 |
| Venous thrombosis | 1.4 | 1.3 | 0.01 | 1.4 | 1.3 | 0.01 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 1.1 | 1.0 | 0.02 | 1.1 | 1.0 | 0.01 |
| Malignant lymphoma | 0.8 | 0.6 | 0.01 | 0.8 | 0.6 | 0.02 |
| Malignant neoplasm of anorectum | 0.1 | 0.1 | 0.00 | 0.2 | 0.1 | 0.01 |
| Malignant tumor of breast | 0.4 | 0.2 | 0.02 | 0.3 | 0.3 | 0.01 |
| Malignant tumor of colon | 0.6 | 0.6 | 0.00 | 0.6 | 0.6 | 0.00 |
| Malignant tumor of lung | 0.3 | 0.4 | -0.01 | 0.4 | 0.4 | 0.00 |
| Malignant tumor of urinary bladder | 0.8 | 0.8 | -0.01 | 0.7 | 0.9 | -0.01 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 38.5 | 39.2 | -0.01 | 38.8 | 39.0 | 0.00 |
| Antibacterials for systemic use | 22.8 | 25.3 | -0.06 | 23.8 | 23.2 | 0.01 |
| Antidepressants | 35.0 | 36.1 | -0.02 | 35.3 | 34.8 | 0.01 |
| Antiepileptics | 21.3 | 20.9 | 0.01 | 21.1 | 21.0 | 0.00 |
| Antiinflammatory and antirheumatic products | 47.8 | 52.1 | -0.09 | 49.2 | 47.8 | 0.03 |
| Antineoplastic agents | 36.8 | 41.7 | -0.10 | 38.8 | 38.2 | 0.01 |
| Antipsoriatics | 1.0 | 2.0 | -0.09 | 1.1 | 1.5 | -0.03 |
| Antithrombotic agents | 28.6 | 28.9 | -0.01 | 28.8 | 28.6 | 0.01 |
| Beta blocking agents | 32.0 | 32.2 | 0.00 | 32.0 | 32.1 | 0.00 |
| Calcium channel blockers | 21.8 | 21.8 | 0.00 | 21.9 | 22.3 | -0.01 |
| Diuretics | 32.8 | 33.5 | -0.02 | 33.1 | 33.2 | 0.00 |
| Drugs for acid related disorders | 52.3 | 55.9 | -0.07 | 53.5 | 52.8 | 0.01 |
| Drugs for obstructive airway diseases | 27.8 | 28.9 | -0.02 | 28.2 | 28.0 | 0.00 |
| Drugs used in diabetes | 19.7 | 19.4 | 0.01 | 19.4 | 19.6 | 0.00 |
| Immunosuppressants | 44.0 | 51.9 | -0.16 | 47.0 | 46.3 | 0.01 |
| Lipid modifying agents | 45.7 | 45.1 | 0.01 | 45.5 | 45.6 | 0.00 |
| Opioids | 31.0 | 34.1 | -0.06 | 32.0 | 31.5 | 0.01 |
| Psycholeptics | 23.7 | 24.8 | -0.03 | 24.0 | 24.0 | 0.00 |
| Psychostimulants, agents used for adhd and nootropics | 1.8 | 1.6 | 0.02 | 1.8 | 1.6 | 0.01 |

## HCQ+AZM vs. HCQ+AMX: AmbEMR

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ+AZM | HCQ+AMX |  | HCQ+AZM | HCQ+AMX |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 20-24 | 0.8 | 0.7 | 0.01 | 0.8 | 0.7 | 0.01 |
| 25-29 | 1.2 | 1.3 | -0.01 | 1.3 | 1.2 | 0.00 |
| 30-34 | 2.5 | 2.3 | 0.02 | 2.6 | 2.3 | 0.02 |
| 35-39 | 3.5 | 3.9 | -0.02 | 3.7 | 3.7 | 0.00 |
| 40-44 | 5.8 | 5.1 | 0.03 | 5.8 | 5.4 | 0.02 |
| 45-49 | 7.5 | 7.3 | 0.01 | 7.7 | 7.3 | 0.01 |
| 50-54 | 10.1 | 10.4 | -0.01 | 10.1 | 10.5 | -0.01 |
| 55-59 | 13.4 | 13.7 | -0.01 | 13.5 | 14.0 | -0.01 |
| 60-64 | 14.1 | 14.4 | -0.01 | 13.9 | 14.2 | -0.01 |
| 65-69 | 13.8 | 14.1 | -0.01 | 13.7 | 14.1 | -0.01 |
| 70-74 | 12.7 | 12.1 | 0.02 | 12.2 | 11.9 | 0.01 |
| 75-79 | 10.6 | 10.1 | 0.02 | 10.6 | 10.3 | 0.01 |
| 80-84 | 3.9 | 4.5 | -0.03 | 4.1 | 4.2 | -0.01 |
| Gender: female | 83.2 | 82.5 | 0.02 | 83.2 | 82.9 | 0.01 |
| Race |  |  |  |  |  |  |
| race = Asian | 1.5 | 1.1 | 0.03 | 1.4 | 1.1 | 0.02 |
| race = White | 75.6 | 75.3 | 0.01 | 75.7 | 75.6 | 0.00 |
| race = African American | 8.2 | 8.1 | 0.00 | 8.2 | 8.1 | 0.00 |
| Ethnicity |  |  |  |  |  |  |
| ethnicity = Hispanic or Latino | 1.5 | 1.2 | 0.03 | 1.4 | 1.2 | 0.02 |
| ethnicity = Not Hispanic or Latino | 85.2 | 84.5 | 0.02 | 85.3 | 84.8 | 0.02 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 43.3 | 34.9 | 0.17 | 39.9 | 40.4 | -0.01 |
| Attention deficit hyperactivity disorder | 0.7 | 0.9 | -0.03 | 0.7 | 0.9 | -0.03 |
| Chronic liver disease | 1.5 | 1.7 | -0.02 | 1.5 | 1.7 | -0.02 |
| Chronic obstructive lung disease | 10.6 | 8.4 | 0.07 | 9.2 | 10.4 | -0.04 |
| Crohn's disease | 0.4 | 0.6 | -0.02 | 0.4 | 0.5 | -0.01 |
| Dementia | 0.7 | 0.9 | -0.03 | 0.7 | 0.9 | -0.02 |
| Depressive disorder | 19.4 | 19.5 | 0.00 | 19.8 | 19.7 | 0.00 |
| Diabetes mellitus | 14.0 | 15.1 | -0.03 | 14.6 | 14.9 | -0.01 |
| Gastroesophageal reflux disease | 20.6 | 21.1 | -0.01 | 20.9 | 21.3 | -0.01 |
| Gastrointestinal hemorrhage | 1.6 | 1.8 | -0.01 | 1.7 | 1.7 | 0.00 |
| Human immunodeficiency virus infection | 0.1 | 0.1 | 0.00 | 0.1 | 0.1 | 0.00 |
| Hyperlipidemia | 33.2 | 32.8 | 0.01 | 33.2 | 32.8 | 0.01 |
| Hypertensive disorder | 41.4 | 42.2 | -0.02 | 41.8 | 41.6 | 0.00 |
| Lesion of liver | 0.8 | 1.1 | -0.03 | 0.9 | 1.1 | -0.02 |
| Obesity | 11.7 | 11.6 | 0.00 | 12.0 | 11.8 | 0.00 |
| Osteoarthritis | 28.3 | 29.7 | -0.03 | 28.8 | 28.8 | 0.00 |
| Pneumonia | 6.5 | 5.0 | 0.06 | 5.7 | 6.5 | -0.03 |
| Psoriasis | 1.6 | 1.8 | -0.02 | 1.6 | 1.7 | -0.01 |
| Renal impairment | 6.5 | 7.3 | -0.03 | 6.7 | 7.2 | -0.02 |
| Rheumatoid arthritis | 80.0 | 78.7 | 0.03 | 79.5 | 79.2 | 0.01 |
| Schizophrenia | 0.1 | 0.1 | 0.01 | 0.1 | 0.1 | 0.01 |
| Ulcerative colitis | 0.5 | 0.4 | 0.02 | 0.6 | 0.4 | 0.04 |
| Urinary tract infectious disease | 9.5 | 11.9 | -0.08 | 10.4 | 10.5 | -0.01 |
| Viral hepatitis C | 0.8 | 1.1 | -0.03 | 0.8 | 1.0 | -0.02 |
| Visual system disorder | 12.0 | 12.4 | -0.01 | 12.2 | 12.2 | 0.00 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 3.3 | 4.0 | -0.04 | 3.4 | 3.9 | -0.03 |
| Cerebrovascular disease | 3.5 | 3.7 | -0.01 | 3.6 | 3.4 | 0.01 |
| Heart disease | 17.5 | 18.4 | -0.02 | 17.7 | 18.2 | -0.01 |
| Heart failure | 3.5 | 3.6 | -0.01 | 3.4 | 3.7 | -0.02 |
| Ischemic heart disease | 1.9 | 2.0 | 0.00 | 2.0 | 1.9 | 0.01 |
| Peripheral vascular disease | 2.0 | 2.2 | -0.01 | 2.0 | 2.0 | 0.00 |
| Pulmonary embolism | 1.0 | 1.0 | 0.00 | 1.0 | 1.0 | 0.00 |
| Venous thrombosis | 1.6 | 1.9 | -0.03 | 1.7 | 1.8 | -0.01 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 0.6 | 0.4 | 0.02 | 0.5 | 0.5 | 0.00 |
| Malignant neoplastic disease | 7.4 | 7.7 | -0.01 | 7.4 | 7.7 | -0.01 |
| Malignant tumor of breast | 1.6 | 1.6 | 0.00 | 1.6 | 1.6 | 0.00 |
| Malignant tumor of lung | 0.5 | 0.4 | 0.02 | 0.4 | 0.5 | -0.01 |
| Malignant tumor of urinary bladder | 0.2 | 0.3 | -0.01 | 0.2 | 0.3 | -0.01 |
| Primary malignant neoplasm of prostate | 0.3 | 0.2 | 0.03 | 0.3 | 0.2 | 0.02 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 35.5 | 36.7 | -0.02 | 35.8 | 36.0 | 0.00 |
| Antibacterials for systemic use | 41.3 | 44.0 | -0.05 | 42.9 | 43.4 | -0.01 |
| Antidepressants | 43.1 | 44.5 | -0.03 | 44.2 | 44.2 | 0.00 |
| Antiepileptics | 28.9 | 30.3 | -0.03 | 30.1 | 29.8 | 0.01 |
| Antiinflammatory and antirheumatic products | 46.2 | 47.0 | -0.02 | 46.7 | 46.7 | 0.00 |
| Antineoplastic agents | 39.6 | 38.0 | 0.03 | 38.4 | 39.1 | -0.02 |
| Antipsoriatics | 0.9 | 0.9 | 0.00 | 1.0 | 0.8 | 0.02 |
| Antithrombotic agents | 25.1 | 27.4 | -0.05 | 25.9 | 26.1 | 0.00 |
| Beta blocking agents | 26.4 | 28.5 | -0.05 | 27.4 | 27.6 | 0.00 |
| Calcium channel blockers | 19.5 | 20.2 | -0.02 | 19.9 | 19.9 | 0.00 |
| Diuretics | 35.3 | 35.5 | 0.00 | 35.6 | 35.4 | 0.00 |
| Drugs for acid related disorders | 49.4 | 51.4 | -0.04 | 50.5 | 50.9 | -0.01 |
| Drugs for obstructive airway diseases | 53.3 | 45.1 | 0.16 | 49.3 | 50.8 | -0.03 |
| Drugs used in diabetes | 14.6 | 15.9 | -0.04 | 15.2 | 15.4 | 0.00 |
| Immunosuppressants | 55.9 | 54.7 | 0.02 | 55.1 | 55.5 | -0.01 |
| Lipid modifying agents | 34.4 | 34.8 | -0.01 | 34.9 | 34.5 | 0.01 |
| Opioids | 34.8 | 36.9 | -0.04 | 36.1 | 35.4 | 0.02 |
| Psychostimulants, agents used for adhd and nootropics | 5.4 | 5.4 | 0.00 | 5.5 | 5.4 | 0.01 |

## HCQ+AZM vs. HCQ+AMX: CCAE

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ+AZM | HCQ+AMX |  | HCQ+AZM | HCQ+AMX |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 15-19 | 0.5 | 0.4 | 0.00 | 0.5 | 0.5 | 0.00 |
| 20-24 | 1.4 | 1.3 | 0.01 | 1.4 | 1.4 | 0.00 |
| 25-29 | 2.2 | 2.1 | 0.01 | 2.2 | 2.2 | 0.00 |
| 30-34 | 4.0 | 3.7 | 0.02 | 4.0 | 3.9 | 0.01 |
| 35-39 | 6.8 | 6.5 | 0.02 | 6.8 | 6.7 | 0.00 |
| 40-44 | 9.5 | 8.9 | 0.02 | 9.3 | 9.3 | 0.00 |
| 45-49 | 13.1 | 13.2 | 0.00 | 13.2 | 13.3 | 0.00 |
| 50-54 | 18.3 | 17.9 | 0.01 | 18.1 | 18.0 | 0.00 |
| 55-59 | 21.5 | 22.0 | -0.01 | 21.5 | 21.8 | -0.01 |
| 60-64 | 20.6 | 21.8 | -0.03 | 21.1 | 21.1 | 0.00 |
| 65-69 | 2.0 | 2.1 | 0.00 | 2.0 | 2.0 | 0.00 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 62.5 | 50.7 | 0.24 | 58.0 | 57.5 | 0.01 |
| Attention deficit hyperactivity disorder | 1.4 | 1.5 | -0.01 | 1.4 | 1.5 | 0.00 |
| Chronic liver disease | 2.7 | 2.9 | -0.01 | 2.7 | 2.8 | -0.01 |
| Chronic obstructive lung disease | 5.6 | 4.4 | 0.06 | 5.0 | 5.2 | -0.01 |
| Dementia | 0.3 | 0.2 | 0.01 | 0.3 | 0.2 | 0.01 |
| Depressive disorder | 14.7 | 14.7 | 0.00 | 14.7 | 14.8 | 0.00 |
| Diabetes mellitus | 12.7 | 13.3 | -0.02 | 13.2 | 13.1 | 0.00 |
| Gastroesophageal reflux disease | 16.5 | 16.8 | -0.01 | 16.7 | 16.8 | 0.00 |
| Human immunodeficiency virus infection | 0.1 | 0.1 | 0.01 | 0.1 | 0.1 | 0.01 |
| Hyperlipidemia | 30.4 | 30.4 | 0.00 | 30.4 | 30.3 | 0.00 |
| Lesion of liver | 0.8 | 0.8 | -0.01 | 0.8 | 0.8 | 0.00 |
| Obesity | 9.4 | 10.8 | -0.05 | 10.2 | 10.1 | 0.00 |
| Osteoarthritis | 40.1 | 42.2 | -0.04 | 41.5 | 41.0 | 0.01 |
| Pneumonia | 6.8 | 4.3 | 0.11 | 5.7 | 5.5 | 0.01 |
| Psoriasis | 3.1 | 3.0 | 0.00 | 3.0 | 3.0 | 0.00 |
| Renal impairment | 3.9 | 4.3 | -0.02 | 4.2 | 4.1 | 0.00 |
| Rheumatoid arthritis | 83.6 | 82.2 | 0.04 | 82.9 | 83.0 | 0.00 |
| Ulcerative colitis | 0.7 | 0.7 | 0.00 | 0.7 | 0.7 | 0.00 |
| Urinary tract infectious disease | 13.6 | 14.3 | -0.02 | 14.0 | 13.9 | 0.00 |
| Viral hepatitis C | 0.7 | 0.9 | -0.02 | 0.8 | 0.9 | -0.01 |
| Visual system disorder | 36.8 | 37.0 | 0.00 | 36.9 | 37.1 | 0.00 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 1.5 | 1.9 | -0.03 | 1.7 | 1.8 | 0.00 |
| Cerebrovascular disease | 3.2 | 3.1 | 0.00 | 3.1 | 3.2 | -0.01 |
| Coronary arteriosclerosis | 4.8 | 5.0 | -0.01 | 5.0 | 4.9 | 0.00 |
| Heart disease | 17.3 | 18.2 | -0.02 | 17.8 | 17.9 | 0.00 |
| Heart failure | 2.5 | 2.3 | 0.01 | 2.5 | 2.4 | 0.01 |
| Ischemic heart disease | 3.2 | 3.2 | 0.00 | 3.3 | 3.1 | 0.01 |
| Peripheral vascular disease | 1.6 | 1.7 | -0.01 | 1.6 | 1.7 | -0.01 |
| Pulmonary embolism | 0.9 | 1.0 | -0.01 | 0.9 | 1.0 | -0.01 |
| Venous thrombosis | 1.6 | 1.8 | -0.01 | 1.7 | 1.8 | 0.00 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 1.2 | 1.1 | 0.01 | 1.2 | 1.1 | 0.00 |
| Malignant lymphoma | 0.7 | 0.6 | 0.00 | 0.6 | 0.6 | 0.00 |
| Malignant neoplastic disease | 7.6 | 7.5 | 0.00 | 7.6 | 7.5 | 0.00 |
| Malignant tumor of colon | 0.2 | 0.2 | -0.01 | 0.2 | 0.2 | 0.00 |
| Malignant tumor of lung | 0.2 | 0.2 | 0.01 | 0.2 | 0.2 | 0.01 |
| Malignant tumor of urinary bladder | 0.2 | 0.1 | 0.00 | 0.1 | 0.1 | 0.00 |
| Primary malignant neoplasm of prostate | 0.2 | 0.3 | -0.02 | 0.2 | 0.3 | -0.01 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 26.6 | 27.2 | -0.01 | 27.1 | 26.9 | 0.00 |
| Antibacterials for systemic use | 50.6 | 50.3 | 0.00 | 51.1 | 51.0 | 0.00 |
| Antidepressants | 43.3 | 42.0 | 0.02 | 43.0 | 42.8 | 0.00 |
| Antiinflammatory and antirheumatic products | 51.0 | 53.1 | -0.04 | 51.9 | 52.0 | 0.00 |
| Antipsoriatics | 0.9 | 0.9 | -0.01 | 0.9 | 0.9 | 0.00 |
| Antithrombotic agents | 8.9 | 10.8 | -0.06 | 9.8 | 9.9 | 0.00 |
| Beta blocking agents | 18.1 | 18.6 | -0.01 | 18.7 | 18.4 | 0.01 |
| Calcium channel blockers | 13.8 | 14.0 | -0.01 | 14.1 | 13.9 | 0.00 |
| Diuretics | 28.0 | 28.0 | 0.00 | 28.3 | 28.3 | 0.00 |
| Drugs for acid related disorders | 40.7 | 40.1 | 0.01 | 40.5 | 40.8 | -0.01 |
| Drugs for obstructive airway diseases | 43.6 | 37.0 | 0.13 | 41.1 | 40.7 | 0.01 |
| Drugs used in diabetes | 9.8 | 10.4 | -0.02 | 10.3 | 10.2 | 0.00 |
| Immunosuppressants | 52.5 | 49.8 | 0.05 | 51.1 | 51.2 | 0.00 |
| Lipid modifying agents | 22.5 | 22.9 | -0.01 | 22.7 | 22.6 | 0.00 |
| Opioids | 40.1 | 42.0 | -0.04 | 41.4 | 41.2 | 0.00 |
| Psycholeptics | 38.6 | 37.4 | 0.02 | 38.2 | 38.1 | 0.00 |
| Psychostimulants, agents used for adhd and nootropics | 7.3 | 7.1 | 0.01 | 7.3 | 7.4 | 0.00 |

## HCQ+AZM vs. HCQ+AMX: CPRD

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ+AZM | HCQ+AMX |  | HCQ+AZM | HCQ+AMX |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 20-24 | <4.3 | 0.3 | 0.07 | 2.8 | 0.3 | 0.20 |
| 25-29 | <4.3 | 1.0 | -0.01 | 2.8 | 1.0 | 0.13 |
| 35-39 | <4.3 | 3.4 | 0.00 | 9.4 | 3.4 | 0.24 |
| 40-44 | <4.3 | 4.8 | -0.07 | 8.9 | 4.8 | 0.16 |
| 45-49 | 7.0 | 7.2 | -0.01 | 4.4 | 7.2 | -0.12 |
| 50-54 | 5.2 | 10.1 | -0.18 | 8.1 | 10.0 | -0.07 |
| 55-59 | 13.9 | 12.9 | 0.03 | 9.4 | 12.9 | -0.11 |
| 60-64 | 20.9 | 14.2 | 0.18 | 13.3 | 14.2 | -0.03 |
| 65-69 | 13.0 | 14.3 | -0.04 | 9.2 | 14.3 | -0.16 |
| 70-74 | 14.8 | 12.2 | 0.08 | 13.3 | 12.2 | 0.03 |
| 75-79 | 8.7 | 9.6 | -0.03 | 5.3 | 9.6 | -0.17 |
| 80-84 | 6.1 | 5.6 | 0.02 | 10.3 | 5.6 | 0.17 |
| 85-89 | <4.3 | 1.9 | -0.09 | <1.9 | 1.9 | -0.16 |
| 90-94 | <4.3 | 0.6 | 0.03 | 2.5 | 0.6 | 0.15 |
| Gender: female | 78.3 | 73.4 | 0.11 | 73.9 | 73.4 | 0.01 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 30.4 | 20.9 | 0.22 | 29.2 | 21.1 | 0.19 |
| Chronic obstructive lung disease | 13.0 | 3.7 | 0.34 | 6.7 | 3.8 | 0.13 |
| Depressive disorder | <4.3 | 2.5 | 0.06 | <1.9 | 2.5 | -0.10 |
| Diabetes mellitus | 4.3 | 2.3 | 0.11 | 3.6 | 2.3 | 0.08 |
| Gastroesophageal reflux disease | <4.3 | 0.7 | 0.02 | <1.9 | 0.7 | -0.06 |
| Gastrointestinal hemorrhage | <4.3 | 1.6 | -0.07 | <1.9 | 1.6 | -0.14 |
| Hyperlipidemia | <4.3 | 0.9 | -0.01 | <1.9 | 0.9 | -0.08 |
| Hypertensive disorder | <4.3 | 2.7 | -0.01 | <1.9 | 2.7 | -0.14 |
| Lesion of liver | <4.3 | 0.1 | 0.11 | <1.9 | <0.1 | 0.04 |
| Obesity | <4.3 | 0.3 | 0.07 | <1.9 | 0.3 | -0.01 |
| Osteoarthritis | 6.1 | 4.4 | 0.07 | 8.1 | 4.5 | 0.15 |
| Pneumonia | <4.3 | 1.4 | 0.09 | <1.9 | 1.4 | -0.05 |
| Renal impairment | <4.3 | 3.5 | -0.18 | 2.5 | 3.5 | -0.06 |
| Rheumatoid arthritis | 45.2 | 36.8 | 0.17 | 36.4 | 36.9 | -0.01 |
| Urinary tract infectious disease | <4.3 | 5.2 | -0.25 | <1.9 | 5.2 | -0.30 |
| Visual system disorder | 7.0 | 8.3 | -0.05 | 9.4 | 8.3 | 0.04 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | <4.3 | 1.1 | 0.12 | <1.9 | 1.1 | -0.03 |
| Heart disease | <4.3 | 3.8 | -0.02 | <1.9 | 3.8 | -0.18 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | <4.3 | <0.1 | 0.12 | <1.9 | <0.1 | 0.05 |
| Malignant lymphoma | <4.3 | <0.1 | 0.12 | <1.9 | <0.1 | 0.05 |
| Malignant neoplastic disease | <4.3 | 1.8 | 0.11 | 3.3 | 1.8 | 0.10 |
| Malignant tumor of breast | <4.3 | 0.1 | 0.10 | 2.5 | 0.1 | 0.20 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 28.7 | 26.5 | 0.05 | 22.2 | 26.5 | -0.10 |
| Antibacterials for systemic use | 73.9 | 44.5 | 0.63 | 49.2 | 45.0 | 0.08 |
| Antidepressants | 38.3 | 31.8 | 0.14 | 29.7 | 31.9 | -0.05 |
| Antiepileptics | 15.7 | 8.7 | 0.21 | 5.0 | 8.8 | -0.15 |
| Antiinflammatory and antirheumatic products | 53.0 | 52.1 | 0.02 | 50.3 | 52.2 | -0.04 |
| Antineoplastic agents | 37.4 | 52.7 | -0.31 | 45.3 | 52.5 | -0.14 |
| Antipsoriatics | <4.3 | 0.9 | -0.01 | 2.5 | 0.9 | 0.12 |
| Antithrombotic agents | 27.0 | 23.8 | 0.07 | 15.8 | 23.9 | -0.20 |
| Beta blocking agents | 10.4 | 16.7 | -0.18 | 7.8 | 16.7 | -0.27 |
| Calcium channel blockers | 18.3 | 18.8 | -0.02 | 11.9 | 18.8 | -0.19 |
| Diuretics | 18.3 | 23.3 | -0.12 | 15.0 | 23.3 | -0.21 |
| Drugs for acid related disorders | 74.8 | 63.9 | 0.24 | 64.7 | 64.1 | 0.01 |
| Drugs for obstructive airway diseases | 69.6 | 32.3 | 0.80 | 29.2 | 33.0 | -0.08 |
| Drugs used in diabetes | 10.4 | 8.8 | 0.06 | 10.3 | 8.8 | 0.05 |
| Immunosuppressants | 47.0 | 58.1 | -0.22 | 50.6 | 57.9 | -0.15 |
| Lipid modifying agents | 32.2 | 28.3 | 0.08 | 16.9 | 28.4 | -0.27 |
| Opioids | 46.1 | 39.2 | 0.14 | 45.3 | 39.3 | 0.12 |
| Psycholeptics | 20.9 | 19.9 | 0.02 | 15.6 | 19.9 | -0.11 |

## HCQ+AZM vs. HCQ+AMX: DAGermany

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ+AZM | HCQ+AMX |  | HCQ+AZM | HCQ+AMX |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 20-24 | <5.6 | <2.5 | 0.02 | <5.6 | <2.5 | 0.02 |
| 30-34 | <5.6 | 4.0 | -0.10 | <5.6 | 4.0 | -0.10 |
| 35-39 | 6.7 | 4.5 | 0.10 | 6.7 | 4.5 | 0.10 |
| 40-44 | 12.4 | 4.0 | 0.31 | 12.4 | 4.0 | 0.31 |
| 45-49 | 7.9 | 9.4 | -0.06 | 7.9 | 9.4 | -0.06 |
| 50-54 | 13.5 | 9.4 | 0.13 | 13.5 | 9.4 | 0.13 |
| 55-59 | 16.9 | 13.4 | 0.10 | 16.9 | 13.4 | 0.10 |
| 60-64 | 12.4 | 10.9 | 0.05 | 12.4 | 10.9 | 0.05 |
| 65-69 | 10.1 | 12.4 | -0.07 | 10.1 | 12.4 | -0.07 |
| 70-74 | 7.9 | 9.4 | -0.06 | 7.9 | 9.4 | -0.06 |
| 75-79 | 5.6 | 6.9 | -0.05 | 5.6 | 6.9 | -0.05 |
| 80-84 | <5.6 | 6.9 | -0.22 | <5.6 | 6.9 | -0.22 |
| Gender: female | 89.9 | 79.2 | 0.30 | 89.9 | 79.2 | 0.30 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 61.8 | 55.4 | 0.13 | 61.8 | 55.4 | 0.13 |
| Chronic liver disease | <5.6 | <2.5 | -0.07 | <5.6 | <2.5 | -0.07 |
| Chronic obstructive lung disease | 6.7 | 11.4 | -0.16 | 6.7 | 11.4 | -0.16 |
| Depressive disorder | 14.6 | 10.4 | 0.13 | 14.6 | 10.4 | 0.13 |
| Diabetes mellitus | 5.6 | 13.4 | -0.27 | 5.6 | 13.4 | -0.27 |
| Hyperlipidemia | 9.0 | 13.4 | -0.14 | 9.0 | 13.4 | -0.14 |
| Hypertensive disorder | 28.1 | 40.1 | -0.26 | 28.1 | 40.1 | -0.25 |
| Obesity | <5.6 | 5.0 | -0.02 | <5.6 | 5.0 | -0.02 |
| Osteoarthritis | 11.2 | 13.4 | -0.06 | 11.2 | 13.4 | -0.06 |
| Pneumonia | <5.6 | 6.9 | -0.22 | <5.6 | 6.9 | -0.22 |
| Psoriasis | <5.6 | <2.5 | 0.15 | <5.6 | <2.5 | 0.15 |
| Renal impairment | <5.6 | 4.5 | -0.06 | <5.6 | 4.5 | -0.06 |
| Rheumatoid arthritis | 56.2 | 57.9 | -0.04 | 56.2 | 57.9 | -0.04 |
| Urinary tract infectious disease | 5.6 | 9.9 | -0.16 | 5.6 | 9.9 | -0.16 |
| Visual system disorder | 11.2 | 16.8 | -0.16 | 11.2 | 16.8 | -0.16 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Cerebrovascular disease | <5.6 | <2.5 | 0.14 | <5.6 | <2.5 | 0.14 |
| Coronary arteriosclerosis | <5.6 | <2.5 | 0.06 | <5.6 | <2.5 | 0.06 |
| Heart disease | 11.2 | 21.8 | -0.29 | 11.2 | 21.8 | -0.29 |
| Heart failure | <5.6 | 6.9 | -0.30 | <5.6 | 6.9 | -0.30 |
| Ischemic heart disease | <5.6 | 7.9 | -0.14 | <5.6 | 7.9 | -0.14 |
| Peripheral vascular disease | <5.6 | 2.5 | -0.10 | <5.6 | 2.5 | -0.10 |
| Venous thrombosis | <5.6 | 5.9 | -0.12 | <5.6 | 5.9 | -0.12 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Malignant neoplastic disease | <5.6 | 6.4 | -0.08 | <5.6 | 6.4 | -0.08 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 29.2 | 39.6 | -0.22 | 29.2 | 39.6 | -0.22 |
| Antibacterials for systemic use | 29.2 | 37.6 | -0.18 | 29.2 | 37.6 | -0.18 |
| Antidepressants | 16.9 | 18.8 | -0.05 | 16.9 | 18.8 | -0.05 |
| Antiepileptics | <5.6 | 7.9 | -0.14 | <5.6 | 7.9 | -0.14 |
| Antiinflammatory and antirheumatic products | 43.8 | 46.5 | -0.06 | 43.8 | 46.5 | -0.05 |
| Antineoplastic agents | 29.2 | 27.2 | 0.04 | 29.2 | 27.2 | 0.04 |
| Antithrombotic agents | 13.5 | 26.2 | -0.32 | 13.5 | 26.2 | -0.32 |
| Beta blocking agents | 25.8 | 35.6 | -0.21 | 25.8 | 35.6 | -0.21 |
| Calcium channel blockers | 16.9 | 18.3 | -0.04 | 16.9 | 18.3 | -0.04 |
| Diuretics | 19.1 | 39.1 | -0.45 | 19.1 | 39.1 | -0.45 |
| Drugs for acid related disorders | 65.2 | 69.8 | -0.10 | 65.2 | 69.8 | -0.10 |
| Drugs for obstructive airway diseases | 19.1 | 21.8 | -0.07 | 19.1 | 21.8 | -0.07 |
| Drugs used in diabetes | 6.7 | 12.9 | -0.21 | 6.7 | 12.9 | -0.21 |
| Immunosuppressants | 37.1 | 32.7 | 0.09 | 37.1 | 32.7 | 0.09 |
| Lipid modifying agents | 5.6 | 17.8 | -0.39 | 5.6 | 17.8 | -0.38 |
| Opioids | 20.2 | 27.2 | -0.16 | 20.2 | 27.2 | -0.16 |
| Psycholeptics | 16.9 | 10.4 | 0.19 | 16.9 | 10.4 | 0.19 |

## HCQ+AZM vs. HCQ+AMX: IMRD

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ+AZM | HCQ+AMX |  | HCQ+AZM | HCQ+AMX |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 25-29 | <4.5 | 0.9 | 0.13 | 3.6 | 0.9 | 0.18 |
| 30-34 | <4.5 | 1.7 | -0.07 | 6.7 | 1.7 | 0.25 |
| 35-39 | 4.5 | 3.1 | 0.07 | 10.0 | 3.1 | 0.28 |
| 40-44 | <4.5 | 4.3 | -0.09 | 3.3 | 4.3 | -0.05 |
| 45-49 | 5.4 | 7.3 | -0.08 | 4.0 | 7.2 | -0.14 |
| 50-54 | <4.5 | 10.1 | -0.26 | 3.8 | 10.1 | -0.25 |
| 55-59 | 9.8 | 12.4 | -0.08 | 2.6 | 12.4 | -0.38 |
| 60-64 | 17.9 | 14.6 | 0.09 | 16.6 | 14.5 | 0.06 |
| 65-69 | 13.4 | 14.6 | -0.04 | 19.7 | 14.7 | 0.13 |
| 70-74 | 19.6 | 12.7 | 0.19 | 14.2 | 12.7 | 0.04 |
| 75-79 | 9.8 | 9.5 | 0.01 | 6.9 | 9.5 | -0.10 |
| 80-84 | 8.0 | 5.7 | 0.09 | 8.3 | 5.7 | 0.10 |
| 85-89 | <4.5 | 2.0 | -0.10 | <1.6 | 2.1 | -0.17 |
| 90-94 | <4.5 | 0.5 | 0.04 | <1.6 | 0.5 | -0.05 |
| Gender: female | 78.6 | 73.8 | 0.11 | 74.1 | 73.8 | 0.01 |
| Race |  |  |  |  |  |  |
| race = White | 30.4 | 30.8 | -0.01 | 48.2 | 30.7 | 0.36 |
| race = Asian Indian | <4.5 | 0.6 | 0.03 | 2.9 | 0.6 | 0.17 |
| race = Pakistani | <4.5 | 0.4 | 0.07 | 1.7 | 0.4 | 0.13 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 29.5 | 20.8 | 0.20 | 20.6 | 20.9 | -0.01 |
| Chronic obstructive lung disease | 17.0 | 3.7 | 0.45 | 5.9 | 3.9 | 0.09 |
| Depressive disorder | 4.5 | 2.5 | 0.11 | 2.6 | 2.5 | 0.00 |
| Diabetes mellitus | 8.0 | 2.1 | 0.27 | 8.3 | 2.1 | 0.28 |
| Gastroesophageal reflux disease | <4.5 | 0.6 | 0.03 | <1.6 | 0.6 | -0.06 |
| Gastrointestinal hemorrhage | <4.5 | 1.4 | -0.05 | <1.6 | 1.4 | -0.13 |
| Hyperlipidemia | <4.5 | 1.0 | -0.01 | <1.6 | 1.0 | -0.10 |
| Hypertensive disorder | <4.5 | 2.6 | 0.00 | <1.6 | 2.6 | -0.15 |
| Obesity | <4.5 | 0.4 | 0.14 | 3.1 | 0.4 | 0.21 |
| Osteoarthritis | <4.5 | 4.6 | -0.05 | 7.4 | 4.6 | 0.12 |
| Pneumonia | <4.5 | 1.1 | 0.17 | <1.6 | 1.1 | -0.02 |
| Renal impairment | <4.5 | 3.1 | -0.03 | <1.6 | 3.2 | -0.18 |
| Rheumatoid arthritis | 33.9 | 37.3 | -0.07 | 42.0 | 37.4 | 0.09 |
| Urinary tract infectious disease | <4.5 | 4.5 | -0.16 | 5.2 | 4.6 | 0.03 |
| Visual system disorder | 9.8 | 8.3 | 0.05 | 10.2 | 8.3 | 0.06 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | <4.5 | 1.1 | -0.02 | <1.6 | 1.1 | -0.11 |
| Cerebrovascular disease | <4.5 | 0.6 | 0.11 | <1.6 | 0.6 | -0.02 |
| Heart disease | <4.5 | 3.8 | -0.12 | <1.6 | 3.8 | -0.23 |
| Venous thrombosis | <4.5 | 0.8 | 0.01 | 6.7 | 0.8 | 0.31 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Malignant lymphoma | <4.5 | 0.1 | 0.11 | <1.6 | 0.1 | 0.03 |
| Malignant neoplastic disease | <4.5 | 1.9 | 0.06 | 5.5 | 1.9 | 0.19 |
| Malignant tumor of breast | <4.5 | 0.2 | 0.09 | 5.0 | 0.2 | 0.30 |
| Medication use |  |  |  |  |  |  |
| Antibacterials for systemic use | 9.8 | 4.6 | 0.20 | 2.6 | 4.6 | -0.11 |
| Antidepressants | <4.5 | 1.1 | 0.16 | <1.6 | 1.1 | -0.02 |
| Antiinflammatory and antirheumatic products | <4.5 | 1.2 | -0.03 | <1.6 | 1.2 | -0.11 |
| Antineoplastic agents | <4.5 | 1.6 | -0.06 | <1.6 | 1.6 | -0.14 |
| Antithrombotic agents | <4.5 | 1.4 | 0.10 | 3.3 | 1.4 | 0.13 |
| Beta blocking agents | <4.5 | 0.5 | 0.05 | <1.6 | 0.5 | -0.04 |
| Diuretics | <4.5 | 1.0 | -0.01 | <1.6 | 1.0 | -0.10 |
| Drugs for acid related disorders | <4.5 | 1.8 | -0.08 | <1.6 | 1.8 | -0.16 |
| Drugs for obstructive airway diseases | <4.5 | 0.7 | 0.02 | <1.6 | 0.7 | -0.07 |
| Immunosuppressants | <4.5 | 1.8 | -0.08 | <1.6 | 1.8 | -0.16 |
| Lipid modifying agents | <4.5 | 1.3 | 0.10 | 3.3 | 1.3 | 0.13 |

## HCQ+AZM vs. HCQ+AMX: MDCD

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ+AZM | HCQ+AMX |  | HCQ+AZM | HCQ+AMX |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 15-19 | 1.3 | 1.5 | -0.02 | 1.2 | 1.5 | -0.02 |
| 20-24 | 2.4 | 2.3 | 0.01 | 2.7 | 2.3 | 0.03 |
| 25-29 | 4.5 | 4.9 | -0.02 | 5.1 | 4.5 | 0.03 |
| 30-34 | 6.1 | 7.4 | -0.05 | 6.9 | 7.0 | -0.01 |
| 35-39 | 9.1 | 10.2 | -0.04 | 9.0 | 9.5 | -0.02 |
| 40-44 | 10.5 | 11.1 | -0.02 | 10.8 | 10.7 | 0.00 |
| 45-49 | 13.1 | 13.6 | -0.02 | 12.8 | 13.7 | -0.03 |
| 50-54 | 16.5 | 15.3 | 0.03 | 16.3 | 16.0 | 0.01 |
| 55-59 | 15.6 | 15.8 | -0.01 | 15.5 | 16.2 | -0.02 |
| 60-64 | 12.3 | 10.8 | 0.05 | 11.8 | 11.0 | 0.02 |
| 65-69 | 4.3 | 3.2 | 0.06 | 4.1 | 3.5 | 0.03 |
| 70-74 | 2.2 | 1.7 | 0.04 | 2.0 | 1.8 | 0.02 |
| 85-89 | 0.3 | 0.4 | 0.00 | 0.3 | 0.4 | -0.02 |
| Gender: female | 89.1 | 89.7 | -0.02 | 89.3 | 89.9 | -0.02 |
| Race |  |  |  |  |  |  |
| race = Black or African American | 27.4 | 29.9 | -0.06 | 27.5 | 28.0 | -0.01 |
| race = White | 57.3 | 54.2 | 0.06 | 56.9 | 56.3 | 0.01 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 69.7 | 54.0 | 0.33 | 61.4 | 63.4 | -0.04 |
| Attention deficit hyperactivity disorder | 2.6 | 2.6 | 0.00 | 2.7 | 2.7 | 0.00 |
| Chronic liver disease | 6.5 | 6.8 | -0.01 | 6.8 | 6.8 | 0.00 |
| Chronic obstructive lung disease | 28.0 | 20.4 | 0.18 | 22.3 | 25.6 | -0.08 |
| Crohn's disease | 1.1 | 0.7 | 0.04 | 1.1 | 0.7 | 0.04 |
| Dementia | 1.2 | 1.5 | -0.03 | 1.2 | 1.6 | -0.03 |
| Depressive disorder | 39.9 | 41.4 | -0.03 | 40.9 | 41.1 | 0.00 |
| Diabetes mellitus | 26.6 | 25.6 | 0.02 | 26.3 | 26.1 | 0.00 |
| Gastroesophageal reflux disease | 35.4 | 33.9 | 0.03 | 34.5 | 34.6 | 0.00 |
| Gastrointestinal hemorrhage | 5.0 | 5.8 | -0.04 | 5.1 | 5.8 | -0.03 |
| Human immunodeficiency virus infection | 0.3 | 0.7 | -0.06 | 0.5 | 0.6 | -0.02 |
| Hyperlipidemia | 38.8 | 35.6 | 0.07 | 37.9 | 37.0 | 0.02 |
| Hypertensive disorder | 59.2 | 58.0 | 0.03 | 59.0 | 59.4 | -0.01 |
| Lesion of liver | 1.3 | 1.7 | -0.03 | 1.5 | 1.9 | -0.03 |
| Obesity | 23.3 | 24.8 | -0.04 | 23.6 | 24.0 | -0.01 |
| Osteoarthritis | 55.2 | 55.1 | 0.00 | 54.6 | 55.7 | -0.02 |
| Pneumonia | 15.9 | 9.1 | 0.21 | 12.1 | 12.4 | -0.01 |
| Psoriasis | 2.1 | 1.9 | 0.01 | 2.2 | 2.1 | 0.00 |
| Renal impairment | 11.6 | 12.0 | -0.01 | 10.8 | 12.0 | -0.04 |
| Rheumatoid arthritis | 81.8 | 83.1 | -0.03 | 82.4 | 83.2 | -0.02 |
| Schizophrenia | 1.6 | 1.7 | -0.01 | 1.7 | 1.7 | 0.00 |
| Ulcerative colitis | 0.5 | 0.6 | -0.01 | 0.7 | 0.6 | 0.01 |
| Urinary tract infectious disease | 20.6 | 22.1 | -0.04 | 21.3 | 21.2 | 0.00 |
| Viral hepatitis C | 4.8 | 5.5 | -0.03 | 5.5 | 5.6 | 0.00 |
| Visual system disorder | 50.0 | 50.4 | -0.01 | 50.1 | 51.1 | -0.02 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 3.1 | 2.8 | 0.02 | 2.8 | 3.0 | -0.01 |
| Cerebrovascular disease | 5.9 | 5.8 | 0.00 | 6.2 | 6.1 | 0.00 |
| Coronary arteriosclerosis | 11.3 | 9.0 | 0.08 | 9.8 | 10.0 | 0.00 |
| Heart disease | 35.0 | 31.0 | 0.09 | 32.2 | 33.2 | -0.02 |
| Heart failure | 10.9 | 9.2 | 0.06 | 9.4 | 10.5 | -0.04 |
| Ischemic heart disease | 9.4 | 6.9 | 0.09 | 8.4 | 7.5 | 0.04 |
| Peripheral vascular disease | 4.6 | 5.2 | -0.03 | 4.3 | 5.2 | -0.04 |
| Pulmonary embolism | 2.6 | 2.8 | -0.01 | 2.4 | 2.9 | -0.04 |
| Venous thrombosis | 3.5 | 3.9 | -0.02 | 3.6 | 4.0 | -0.02 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 1.4 | 1.5 | 0.00 | 1.5 | 1.5 | -0.01 |
| Malignant lymphoma | 0.5 | 0.5 | 0.01 | 0.6 | 0.4 | 0.03 |
| Malignant neoplasm of anorectum | <0.1 | 0.2 | -0.03 | 0.1 | 0.2 | -0.02 |
| Malignant neoplastic disease | 7.2 | 7.0 | 0.01 | 7.1 | 6.9 | 0.01 |
| Malignant tumor of lung | 0.5 | 0.6 | -0.01 | 0.4 | 0.6 | -0.03 |
| Malignant tumor of urinary bladder | <0.1 | <0.1 | 0.02 | <0.1 | <0.1 | 0.02 |
| Primary malignant neoplasm of prostate | <0.1 | 0.2 | -0.02 | <0.1 | 0.1 | -0.01 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 36.3 | 34.4 | 0.04 | 35.0 | 35.0 | 0.00 |
| Antibacterials for systemic use | 60.5 | 59.7 | 0.02 | 60.1 | 59.8 | 0.00 |
| Antidepressants | 62.3 | 61.3 | 0.02 | 62.3 | 62.4 | 0.00 |
| Antiepileptics | 51.0 | 49.8 | 0.02 | 51.1 | 50.2 | 0.02 |
| Antiinflammatory and antirheumatic products | 56.8 | 59.4 | -0.05 | 59.3 | 58.0 | 0.03 |
| Antineoplastic agents | 36.9 | 34.2 | 0.06 | 36.0 | 35.6 | 0.01 |
| Antipsoriatics | 0.7 | 1.0 | -0.03 | 0.6 | 1.1 | -0.05 |
| Antithrombotic agents | 22.8 | 22.6 | 0.00 | 22.1 | 22.9 | -0.02 |
| Beta blocking agents | 28.6 | 27.3 | 0.03 | 27.7 | 28.3 | -0.01 |
| Calcium channel blockers | 23.4 | 22.0 | 0.03 | 22.3 | 22.7 | -0.01 |
| Diuretics | 40.4 | 37.6 | 0.06 | 39.1 | 39.2 | 0.00 |
| Drugs for acid related disorders | 61.7 | 59.8 | 0.04 | 60.3 | 61.6 | -0.03 |
| Drugs for obstructive airway diseases | 65.5 | 53.5 | 0.25 | 59.0 | 60.3 | -0.03 |
| Drugs used in diabetes | 19.8 | 18.8 | 0.02 | 19.5 | 18.9 | 0.02 |
| Immunosuppressants | 53.1 | 49.4 | 0.07 | 51.5 | 51.8 | 0.00 |
| Lipid modifying agents | 32.0 | 30.2 | 0.04 | 31.0 | 31.3 | -0.01 |
| Opioids | 66.6 | 68.3 | -0.04 | 67.6 | 68.7 | -0.02 |
| Psycholeptics | 58.0 | 56.7 | 0.03 | 57.4 | 57.6 | 0.00 |
| Psychostimulants, agents used for adhd and nootropics | 8.3 | 7.7 | 0.02 | 8.2 | 7.7 | 0.02 |

## HCQ+AZM vs. HCQ+AMX: MDCR

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ+AZM | HCQ+AMX |  | HCQ+AZM | HCQ+AMX |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 45-49 | 0.1 | 0.1 | 0.02 | 0.1 | 0.1 | 0.02 |
| 55-59 | 1.0 | 1.1 | 0.00 | 1.0 | 1.2 | -0.02 |
| 60-64 | 2.1 | 2.2 | -0.01 | 2.2 | 2.3 | -0.01 |
| 65-69 | 29.2 | 28.1 | 0.03 | 29.0 | 28.7 | 0.01 |
| 70-74 | 27.7 | 28.2 | -0.01 | 27.8 | 28.0 | 0.00 |
| 75-79 | 19.6 | 20.2 | -0.01 | 19.8 | 20.0 | 0.00 |
| 80-84 | 12.3 | 13.0 | -0.02 | 12.4 | 12.6 | -0.01 |
| 85-89 | 5.8 | 5.3 | 0.02 | 5.7 | 5.3 | 0.02 |
| 90-94 | 1.4 | 1.4 | 0.00 | 1.4 | 1.3 | 0.01 |
| 95-99 | 0.1 | 0.2 | -0.01 | 0.1 | 0.2 | -0.02 |
| Gender: female | 78.1 | 74.0 | 0.10 | 75.7 | 75.7 | 0.00 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 53.3 | 34.2 | 0.39 | 42.5 | 44.4 | -0.04 |
| Attention deficit hyperactivity disorder | 0.1 | 0.2 | -0.01 | 0.1 | 0.2 | -0.01 |
| Chronic liver disease | 1.7 | 2.0 | -0.03 | 1.7 | 2.1 | -0.03 |
| Chronic obstructive lung disease | 20.3 | 14.7 | 0.15 | 16.7 | 18.1 | -0.04 |
| Crohn's disease | 0.6 | 0.5 | 0.02 | 0.7 | 0.5 | 0.03 |
| Dementia | 2.1 | 2.3 | -0.02 | 2.2 | 2.3 | 0.00 |
| Depressive disorder | 10.4 | 11.0 | -0.02 | 10.3 | 11.0 | -0.02 |
| Diabetes mellitus | 20.7 | 20.7 | 0.00 | 20.6 | 20.4 | 0.00 |
| Gastroesophageal reflux disease | 19.4 | 18.8 | 0.02 | 19.2 | 19.7 | -0.01 |
| Gastrointestinal hemorrhage | 4.4 | 5.1 | -0.03 | 4.6 | 5.0 | -0.02 |
| Human immunodeficiency virus infection | <0.1 | 0.1 | -0.02 | <0.1 | 0.1 | -0.02 |
| Hyperlipidemia | 39.1 | 40.0 | -0.02 | 39.8 | 39.7 | 0.00 |
| Hypertensive disorder | 62.2 | 61.6 | 0.01 | 61.9 | 61.4 | 0.01 |
| Lesion of liver | 0.9 | 1.1 | -0.02 | 0.9 | 1.1 | -0.02 |
| Obesity | 5.5 | 6.3 | -0.04 | 5.8 | 6.2 | -0.02 |
| Osteoarthritis | 53.3 | 57.7 | -0.09 | 56.1 | 55.5 | 0.01 |
| Pneumonia | 14.3 | 9.2 | 0.16 | 11.6 | 12.0 | -0.01 |
| Psoriasis | 2.0 | 2.4 | -0.03 | 2.2 | 2.4 | -0.02 |
| Renal impairment | 12.6 | 12.5 | 0.00 | 12.7 | 12.5 | 0.01 |
| Rheumatoid arthritis | 87.0 | 86.5 | 0.02 | 86.7 | 86.6 | 0.00 |
| Schizophrenia | <0.1 | 0.1 | -0.01 | <0.1 | 0.1 | -0.01 |
| Ulcerative colitis | 0.7 | 0.7 | -0.01 | 0.6 | 0.7 | -0.01 |
| Urinary tract infectious disease | 15.2 | 17.1 | -0.05 | 15.6 | 16.1 | -0.01 |
| Viral hepatitis C | 0.4 | 0.5 | -0.02 | 0.4 | 0.5 | -0.01 |
| Visual system disorder | 61.5 | 61.0 | 0.01 | 61.3 | 60.8 | 0.01 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 9.6 | 11.3 | -0.06 | 10.3 | 10.6 | -0.01 |
| Cerebrovascular disease | 12.0 | 11.3 | 0.02 | 11.8 | 11.3 | 0.02 |
| Coronary arteriosclerosis | 19.8 | 20.3 | -0.01 | 20.7 | 20.5 | 0.01 |
| Heart disease | 44.9 | 46.4 | -0.03 | 45.7 | 46.0 | -0.01 |
| Heart failure | 11.9 | 10.5 | 0.04 | 11.4 | 11.2 | 0.01 |
| Ischemic heart disease | 10.5 | 10.0 | 0.02 | 10.7 | 10.2 | 0.02 |
| Peripheral vascular disease | 6.3 | 6.4 | 0.00 | 6.5 | 6.0 | 0.02 |
| Pulmonary embolism | 1.4 | 1.4 | 0.01 | 1.5 | 1.3 | 0.02 |
| Venous thrombosis | 3.2 | 3.8 | -0.04 | 3.5 | 3.7 | -0.02 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 2.0 | 2.3 | -0.02 | 2.1 | 2.2 | -0.01 |
| Malignant lymphoma | 1.5 | 1.4 | 0.01 | 1.6 | 1.4 | 0.02 |
| Malignant neoplasm of anorectum | 0.3 | 0.4 | -0.02 | 0.3 | 0.4 | -0.02 |
| Malignant neoplastic disease | 18.8 | 19.7 | -0.02 | 19.4 | 19.1 | 0.01 |
| Malignant tumor of breast | 4.1 | 3.9 | 0.01 | 4.3 | 3.9 | 0.02 |
| Malignant tumor of colon | 0.6 | 0.8 | -0.02 | 0.7 | 0.8 | -0.01 |
| Malignant tumor of lung | 0.8 | 0.9 | -0.01 | 0.8 | 1.0 | -0.03 |
| Malignant tumor of urinary bladder | 0.9 | 0.9 | 0.00 | 0.9 | 0.9 | 0.00 |
| Primary malignant neoplasm of prostate | 1.9 | 2.4 | -0.03 | 2.2 | 2.1 | 0.01 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 48.0 | 47.7 | 0.00 | 47.7 | 48.3 | -0.01 |
| Antibacterials for systemic use | 53.1 | 51.8 | 0.03 | 52.4 | 52.7 | -0.01 |
| Antidepressants | 36.6 | 35.7 | 0.02 | 36.2 | 37.1 | -0.02 |
| Antiepileptics | 23.7 | 23.4 | 0.01 | 23.9 | 23.7 | 0.01 |
| Antiinflammatory and antirheumatic products | 37.0 | 41.3 | -0.09 | 40.3 | 39.5 | 0.02 |
| Antineoplastic agents | 37.1 | 36.1 | 0.02 | 36.5 | 37.2 | -0.02 |
| Antipsoriatics | 1.3 | 1.2 | 0.01 | 1.3 | 1.3 | 0.00 |
| Antithrombotic agents | 23.3 | 26.2 | -0.07 | 24.7 | 24.6 | 0.00 |
| Beta blocking agents | 40.3 | 41.7 | -0.03 | 41.4 | 41.0 | 0.01 |
| Calcium channel blockers | 30.5 | 29.5 | 0.02 | 30.2 | 29.9 | 0.01 |
| Diuretics | 48.1 | 47.5 | 0.01 | 47.6 | 48.4 | -0.02 |
| Drugs for acid related disorders | 52.0 | 49.7 | 0.05 | 51.2 | 51.6 | -0.01 |
| Drugs for obstructive airway diseases | 49.3 | 36.0 | 0.27 | 41.8 | 43.0 | -0.02 |
| Drugs used in diabetes | 15.5 | 15.1 | 0.01 | 15.5 | 15.1 | 0.01 |
| Immunosuppressants | 49.6 | 47.6 | 0.04 | 48.5 | 49.3 | -0.02 |
| Lipid modifying agents | 47.4 | 47.6 | 0.00 | 48.0 | 47.9 | 0.00 |
| Opioids | 41.9 | 44.9 | -0.06 | 42.9 | 43.2 | 0.00 |
| Psycholeptics | 38.7 | 37.1 | 0.03 | 37.9 | 38.2 | -0.01 |
| Psychostimulants, agents used for adhd and nootropics | 2.3 | 2.6 | -0.02 | 2.4 | 2.7 | -0.02 |

## HCQ+AZM vs. HCQ+AMX: OpenClaims

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ+AZM | HCQ+AMX |  | HCQ+AZM | HCQ+AMX |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 15-19 | 0.3 | 0.3 | 0.00 | 0.3 | 0.3 | 0.00 |
| 20-24 | 1.0 | 1.0 | 0.00 | 1.0 | 1.0 | 0.00 |
| 25-29 | 1.8 | 1.7 | 0.00 | 1.8 | 1.8 | 0.00 |
| 30-34 | 3.0 | 2.9 | 0.01 | 3.0 | 2.9 | 0.00 |
| 40-44 | 6.1 | 5.7 | 0.02 | 6.0 | 5.9 | 0.00 |
| 50-54 | 11.7 | 11.1 | 0.02 | 11.5 | 11.5 | 0.00 |
| 55-59 | 14.0 | 13.9 | 0.00 | 14.0 | 14.0 | 0.00 |
| 60-64 | 13.8 | 14.1 | -0.01 | 13.9 | 14.1 | 0.00 |
| 65-69 | 12.4 | 13.0 | -0.02 | 12.7 | 12.7 | 0.00 |
| 80-84 | 4.0 | 4.6 | -0.03 | 4.3 | 4.2 | 0.00 |
| 85-89 | 0.2 | 0.2 | 0.00 | 0.2 | 0.2 | 0.01 |
| Gender: female | 84.7 | 82.1 | 0.07 | 83.5 | 83.5 | 0.00 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 36.6 | 27.3 | 0.20 | 33.1 | 31.5 | 0.03 |
| Attention deficit hyperactivity disorder | 0.9 | 0.8 | 0.00 | 0.9 | 0.8 | 0.00 |
| Chronic liver disease | 2.1 | 2.2 | -0.01 | 2.2 | 2.2 | 0.00 |
| Chronic obstructive lung disease | 10.6 | 8.0 | 0.09 | 9.4 | 9.3 | 0.00 |
| Crohn's disease | 0.5 | 0.5 | 0.00 | 0.5 | 0.5 | 0.00 |
| Dementia | 0.9 | 1.0 | -0.01 | 0.9 | 0.9 | 0.00 |
| Depressive disorder | 11.3 | 11.6 | -0.01 | 11.7 | 11.5 | 0.01 |
| Diabetes mellitus | 16.5 | 16.9 | -0.01 | 16.8 | 16.7 | 0.00 |
| Gastroesophageal reflux disease | 5.5 | 6.4 | -0.04 | 6.0 | 5.9 | 0.00 |
| Gastrointestinal hemorrhage | 2.5 | 2.7 | -0.01 | 2.6 | 2.6 | 0.00 |
| Hyperlipidemia | 26.6 | 27.3 | -0.02 | 27.1 | 26.8 | 0.01 |
| Hypertensive disorder | 37.0 | 38.1 | -0.02 | 37.9 | 37.4 | 0.01 |
| Lesion of liver | 0.8 | 0.9 | -0.01 | 0.9 | 0.9 | 0.00 |
| Obesity | 7.6 | 7.8 | -0.01 | 7.8 | 7.7 | 0.00 |
| Osteoarthritis | 35.5 | 38.0 | -0.05 | 37.0 | 36.6 | 0.01 |
| Pneumonia | 7.1 | 4.8 | 0.10 | 6.1 | 5.8 | 0.01 |
| Psoriasis | 1.9 | 1.9 | 0.00 | 2.0 | 1.9 | 0.00 |
| Renal impairment | 7.2 | 7.7 | -0.02 | 7.5 | 7.5 | 0.00 |
| Rheumatoid arthritis | 68.4 | 67.8 | 0.01 | 68.1 | 68.0 | 0.00 |
| Schizophrenia | 0.2 | 0.2 | 0.01 | 0.2 | 0.2 | 0.01 |
| Ulcerative colitis | 0.5 | 0.5 | 0.00 | 0.5 | 0.5 | 0.00 |
| Urinary tract infectious disease | 10.0 | 11.0 | -0.03 | 10.6 | 10.5 | 0.00 |
| Viral hepatitis C | 1.0 | 1.1 | -0.01 | 1.0 | 1.0 | 0.00 |
| Visual system disorder | 26.7 | 27.3 | -0.01 | 27.1 | 27.0 | 0.00 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 3.5 | 4.4 | -0.05 | 4.0 | 4.0 | 0.00 |
| Cerebrovascular disease | 3.5 | 3.5 | 0.00 | 3.6 | 3.5 | 0.00 |
| Coronary arteriosclerosis | 7.3 | 7.7 | -0.02 | 7.7 | 7.6 | 0.00 |
| Heart disease | 19.8 | 20.8 | -0.02 | 20.4 | 20.3 | 0.00 |
| Ischemic heart disease | 3.9 | 3.9 | 0.00 | 4.0 | 3.9 | 0.00 |
| Peripheral vascular disease | 10.4 | 11.2 | -0.03 | 11.0 | 10.8 | 0.00 |
| Pulmonary embolism | 0.9 | 1.0 | -0.01 | 1.0 | 1.0 | 0.00 |
| Venous thrombosis | 1.6 | 1.8 | -0.01 | 1.7 | 1.7 | 0.00 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 1.0 | 1.1 | -0.01 | 1.1 | 1.1 | 0.00 |
| Malignant lymphoma | 0.7 | 0.7 | 0.00 | 0.7 | 0.7 | 0.00 |
| Malignant neoplasm of anorectum | 0.1 | 0.1 | 0.00 | 0.1 | 0.1 | 0.00 |
| Malignant neoplastic disease | 8.0 | 8.4 | -0.01 | 8.3 | 8.2 | 0.00 |
| Malignant tumor of breast | 2.1 | 2.1 | 0.00 | 2.2 | 2.1 | 0.00 |
| Malignant tumor of colon | 0.3 | 0.3 | -0.01 | 0.3 | 0.3 | 0.00 |
| Malignant tumor of lung | 0.4 | 0.3 | 0.01 | 0.4 | 0.4 | 0.00 |
| Malignant tumor of urinary bladder | 0.2 | 0.3 | -0.01 | 0.2 | 0.3 | 0.00 |
| Primary malignant neoplasm of prostate | 0.6 | 0.7 | -0.01 | 0.6 | 0.6 | 0.00 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 37.3 | 38.2 | -0.02 | 38.0 | 37.9 | 0.00 |
| Antibacterials for systemic use | 49.3 | 49.7 | -0.01 | 49.9 | 49.9 | 0.00 |
| Antidepressants | 45.6 | 45.4 | 0.00 | 46.0 | 45.8 | 0.00 |
| Antiepileptics | 32.9 | 33.3 | -0.01 | 33.5 | 33.3 | 0.00 |
| Antiinflammatory and antirheumatic products | 45.3 | 47.7 | -0.05 | 46.8 | 46.6 | 0.00 |
| Antineoplastic agents | 38.6 | 35.9 | 0.06 | 37.0 | 37.3 | 0.00 |
| Antithrombotic agents | 15.7 | 18.3 | -0.07 | 17.2 | 17.0 | 0.00 |
| Beta blocking agents | 28.8 | 30.2 | -0.03 | 29.7 | 29.6 | 0.00 |
| Calcium channel blockers | 21.7 | 22.0 | -0.01 | 22.0 | 21.9 | 0.00 |
| Diuretics | 35.6 | 35.8 | 0.00 | 35.9 | 35.9 | 0.00 |
| Drugs for acid related disorders | 47.6 | 47.4 | 0.00 | 47.7 | 47.8 | 0.00 |
| Drugs for obstructive airway diseases | 50.2 | 40.6 | 0.19 | 45.8 | 45.5 | 0.01 |
| Immunosuppressants | 52.8 | 50.2 | 0.05 | 51.4 | 51.5 | 0.00 |
| Lipid modifying agents | 34.8 | 35.9 | -0.02 | 35.6 | 35.5 | 0.00 |
| Opioids | 41.8 | 44.3 | -0.05 | 43.5 | 43.2 | 0.01 |
| Psycholeptics | 39.2 | 38.4 | 0.02 | 39.3 | 39.2 | 0.00 |
| Psychostimulants, agents used for adhd and nootropics | 6.7 | 6.5 | 0.01 | 6.8 | 6.7 | 0.00 |

## HCQ+AZM vs. HCQ+AMX: Optum

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ+AZM | HCQ+AMX |  | HCQ+AZM | HCQ+AMX |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 15-19 | 0.3 | 0.2 | 0.00 | 0.2 | 0.3 | 0.00 |
| 20-24 | 0.8 | 0.8 | 0.00 | 0.9 | 1.0 | -0.01 |
| 25-29 | 1.5 | 1.4 | 0.01 | 1.5 | 1.4 | 0.01 |
| 30-34 | 3.1 | 2.7 | 0.02 | 3.0 | 2.8 | 0.01 |
| 35-39 | 4.4 | 4.2 | 0.01 | 4.3 | 4.4 | -0.01 |
| 40-44 | 6.8 | 6.0 | 0.03 | 6.6 | 6.4 | 0.01 |
| 45-49 | 8.6 | 8.6 | 0.00 | 8.6 | 8.9 | -0.01 |
| 55-59 | 14.0 | 13.5 | 0.01 | 13.9 | 13.6 | 0.01 |
| 60-64 | 13.3 | 13.2 | 0.00 | 13.3 | 13.0 | 0.01 |
| 65-69 | 12.1 | 12.8 | -0.02 | 12.4 | 12.6 | -0.01 |
| 70-74 | 10.2 | 10.8 | -0.02 | 10.2 | 10.3 | 0.00 |
| 75-79 | 7.2 | 7.8 | -0.02 | 7.2 | 7.4 | -0.01 |
| 80-84 | 4.4 | 4.8 | -0.02 | 4.4 | 4.5 | -0.01 |
| 85-89 | 1.7 | 1.9 | -0.02 | 1.8 | 1.8 | 0.00 |
| Gender: female | 84.9 | 82.9 | 0.06 | 84.0 | 83.9 | 0.00 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 64.9 | 48.7 | 0.33 | 57.7 | 57.7 | 0.00 |
| Chronic obstructive lung disease | 14.8 | 11.0 | 0.11 | 13.0 | 13.1 | 0.00 |
| Crohn's disease | 0.7 | 0.7 | 0.01 | 0.8 | 0.6 | 0.02 |
| Dementia | 1.5 | 1.9 | -0.03 | 1.7 | 1.9 | -0.02 |
| Depressive disorder | 20.7 | 21.4 | -0.02 | 21.3 | 21.2 | 0.00 |
| Diabetes mellitus | 20.4 | 20.7 | -0.01 | 20.4 | 20.7 | -0.01 |
| Gastroesophageal reflux disease | 25.6 | 26.1 | -0.01 | 26.1 | 25.8 | 0.01 |
| Gastrointestinal hemorrhage | 4.2 | 4.5 | -0.02 | 4.4 | 4.5 | 0.00 |
| Human immunodeficiency virus infection | 0.2 | 0.2 | 0.00 | 0.2 | 0.2 | 0.00 |
| Hyperlipidemia | 46.3 | 46.7 | -0.01 | 46.4 | 46.3 | 0.00 |
| Hypertensive disorder | 53.9 | 55.5 | -0.03 | 54.6 | 54.8 | 0.00 |
| Lesion of liver | 1.1 | 1.3 | -0.02 | 1.1 | 1.3 | -0.02 |
| Osteoarthritis | 52.5 | 56.2 | -0.07 | 54.5 | 54.5 | 0.00 |
| Pneumonia | 10.7 | 7.2 | 0.12 | 9.0 | 9.0 | 0.00 |
| Psoriasis | 3.3 | 3.0 | 0.01 | 3.2 | 3.1 | 0.01 |
| Renal impairment | 11.1 | 12.4 | -0.04 | 11.5 | 11.7 | -0.01 |
| Rheumatoid arthritis | 84.5 | 83.3 | 0.03 | 84.0 | 84.0 | 0.00 |
| Schizophrenia | 0.2 | 0.2 | -0.01 | 0.2 | 0.2 | 0.00 |
| Ulcerative colitis | 0.7 | 0.8 | -0.01 | 0.8 | 0.8 | 0.00 |
| Urinary tract infectious disease | 17.6 | 19.3 | -0.04 | 18.6 | 18.5 | 0.00 |
| Viral hepatitis C | 1.1 | 1.4 | -0.03 | 1.2 | 1.3 | -0.01 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 4.7 | 6.0 | -0.06 | 5.2 | 5.5 | -0.01 |
| Cerebrovascular disease | 6.5 | 7.0 | -0.02 | 6.6 | 6.8 | -0.01 |
| Coronary arteriosclerosis | 11.4 | 12.1 | -0.02 | 11.6 | 11.8 | 0.00 |
| Heart disease | 29.8 | 31.2 | -0.03 | 30.4 | 30.6 | 0.00 |
| Heart failure | 7.5 | 7.4 | 0.00 | 7.6 | 7.4 | 0.01 |
| Ischemic heart disease | 7.0 | 7.3 | -0.01 | 7.1 | 7.3 | 0.00 |
| Peripheral vascular disease | 4.9 | 5.2 | -0.02 | 5.1 | 5.0 | 0.01 |
| Pulmonary embolism | 1.3 | 1.4 | -0.01 | 1.3 | 1.4 | 0.00 |
| Venous thrombosis | 2.5 | 2.9 | -0.02 | 2.6 | 2.8 | -0.01 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 1.6 | 1.5 | 0.01 | 1.7 | 1.5 | 0.01 |
| Malignant lymphoma | 0.9 | 0.9 | 0.00 | 0.9 | 0.9 | 0.01 |
| Malignant neoplasm of anorectum | 0.1 | 0.2 | -0.02 | 0.1 | 0.2 | -0.01 |
| Malignant neoplastic disease | 11.3 | 11.9 | -0.02 | 11.4 | 11.6 | -0.01 |
| Malignant tumor of breast | 2.7 | 2.7 | 0.00 | 2.6 | 2.7 | 0.00 |
| Malignant tumor of colon | 0.4 | 0.4 | -0.01 | 0.3 | 0.4 | -0.01 |
| Malignant tumor of lung | 0.6 | 0.4 | 0.02 | 0.5 | 0.5 | -0.01 |
| Malignant tumor of urinary bladder | 0.3 | 0.4 | -0.03 | 0.3 | 0.4 | -0.01 |
| Primary malignant neoplasm of prostate | 0.8 | 0.9 | -0.02 | 0.8 | 0.8 | 0.00 |
| Medication use |  |  |  |  |  |  |
| Antidepressants | 42.5 | 42.6 | 0.00 | 43.0 | 42.8 | 0.00 |
| Antiepileptics | 27.7 | 28.2 | -0.01 | 28.4 | 27.9 | 0.01 |
| Antiinflammatory and antirheumatic products | 44.2 | 45.7 | -0.03 | 45.5 | 45.2 | 0.01 |
| Antineoplastic agents | 35.2 | 33.1 | 0.04 | 33.4 | 34.2 | -0.02 |
| Antipsoriatics | 1.1 | 1.0 | 0.01 | 1.1 | 1.1 | 0.01 |
| Antithrombotic agents | 13.1 | 15.4 | -0.07 | 14.0 | 14.2 | 0.00 |
| Beta blocking agents | 25.8 | 27.1 | -0.03 | 26.5 | 26.4 | 0.00 |
| Drugs for acid related disorders | 41.8 | 41.9 | 0.00 | 41.9 | 41.8 | 0.00 |
| Drugs for obstructive airway diseases | 45.4 | 36.4 | 0.18 | 41.2 | 41.1 | 0.00 |
| Immunosuppressants | 49.8 | 47.4 | 0.05 | 48.3 | 48.4 | 0.00 |
| Lipid modifying agents | 32.4 | 33.2 | -0.02 | 32.6 | 32.6 | 0.00 |
| Opioids | 41.0 | 43.3 | -0.05 | 42.7 | 42.0 | 0.01 |
| Psycholeptics | 35.8 | 36.3 | -0.01 | 36.5 | 36.6 | 0.00 |
| Psychostimulants, agents used for adhd and nootropics | 5.2 | 4.8 | 0.02 | 5.3 | 5.0 | 0.02 |

## HCQ+AZM vs. HCQ+AMX: PanTher

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ+AZM | HCQ+AMX |  | HCQ+AZM | HCQ+AMX |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 15-19 | 0.2 | 0.3 | -0.02 | 0.2 | 0.3 | -0.02 |
| 20-24 | 0.9 | 0.9 | 0.00 | 1.1 | 0.8 | 0.03 |
| 25-29 | 1.6 | 1.7 | 0.00 | 1.9 | 1.6 | 0.02 |
| 30-34 | 2.7 | 3.1 | -0.03 | 2.9 | 2.9 | 0.00 |
| 35-39 | 3.7 | 4.5 | -0.04 | 4.1 | 4.1 | 0.00 |
| 40-44 | 5.3 | 5.9 | -0.03 | 5.7 | 6.0 | -0.01 |
| 45-49 | 7.1 | 7.4 | -0.01 | 7.3 | 7.4 | 0.00 |
| 50-54 | 10.5 | 10.5 | 0.00 | 10.5 | 10.3 | 0.01 |
| 55-59 | 13.1 | 13.8 | -0.02 | 13.2 | 13.9 | -0.02 |
| 60-64 | 13.7 | 13.6 | 0.00 | 13.9 | 13.8 | 0.00 |
| 65-69 | 12.6 | 12.2 | 0.01 | 12.4 | 12.5 | 0.00 |
| 70-74 | 10.9 | 10.5 | 0.01 | 10.5 | 10.6 | 0.00 |
| 75-79 | 8.6 | 7.6 | 0.04 | 8.2 | 7.9 | 0.01 |
| 80-84 | 6.4 | 6.0 | 0.02 | 5.9 | 5.8 | 0.00 |
| 85-89 | 2.6 | 2.1 | 0.04 | 2.3 | 2.0 | 0.02 |
| Gender: female | 82.3 | 82.1 | 0.00 | 82.9 | 82.7 | 0.01 |
| Race |  |  |  |  |  |  |
| race = Asian | 1.1 | 1.0 | 0.01 | 1.0 | 1.0 | 0.01 |
| race = Black or African American | 10.5 | 9.4 | 0.04 | 10.0 | 9.4 | 0.02 |
| race = White | 83.4 | 84.3 | -0.02 | 84.1 | 84.4 | -0.01 |
| Ethnicity |  |  |  |  |  |  |
| ethnicity = Hispanic or Latino | 4.6 | 4.4 | 0.01 | 4.5 | 4.5 | 0.00 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 57.2 | 43.2 | 0.28 | 52.6 | 51.8 | 0.02 |
| Attention deficit hyperactivity disorder | 1.0 | 1.5 | -0.04 | 1.1 | 1.4 | -0.03 |
| Chronic liver disease | 3.3 | 3.4 | -0.01 | 3.4 | 3.4 | 0.00 |
| Chronic obstructive lung disease | 19.5 | 11.0 | 0.24 | 15.2 | 15.1 | 0.00 |
| Crohn's disease | 0.6 | 0.6 | 0.00 | 0.7 | 0.5 | 0.02 |
| Dementia | 2.2 | 1.9 | 0.02 | 1.9 | 1.9 | 0.00 |
| Depressive disorder | 23.7 | 23.4 | 0.01 | 23.9 | 23.4 | 0.01 |
| Diabetes mellitus | 19.3 | 18.3 | 0.03 | 18.8 | 18.4 | 0.01 |
| Gastroesophageal reflux disease | 29.6 | 28.1 | 0.03 | 29.2 | 28.8 | 0.01 |
| Human immunodeficiency virus infection | 0.2 | 0.1 | 0.01 | 0.2 | 0.2 | 0.00 |
| Hyperlipidemia | 40.8 | 38.8 | 0.04 | 39.7 | 39.4 | 0.01 |
| Hypertensive disorder | 51.4 | 49.7 | 0.03 | 50.4 | 50.4 | 0.00 |
| Lesion of liver | 1.5 | 1.5 | 0.00 | 1.6 | 1.4 | 0.01 |
| Obesity | 17.5 | 18.1 | -0.02 | 17.6 | 17.8 | -0.01 |
| Osteoarthritis | 41.1 | 42.2 | -0.02 | 41.4 | 41.0 | 0.01 |
| Pneumonia | 20.6 | 7.6 | 0.38 | 14.7 | 12.4 | 0.07 |
| Psoriasis | 2.1 | 2.1 | 0.00 | 2.2 | 2.1 | 0.01 |
| Renal impairment | 14.7 | 12.8 | 0.06 | 13.2 | 12.6 | 0.02 |
| Rheumatoid arthritis | 84.8 | 83.4 | 0.04 | 84.0 | 84.3 | -0.01 |
| Schizophrenia | 0.3 | 0.3 | -0.01 | 0.2 | 0.3 | -0.01 |
| Ulcerative colitis | 0.5 | 0.7 | -0.03 | 0.6 | 0.6 | 0.00 |
| Urinary tract infectious disease | 13.1 | 14.1 | -0.03 | 13.7 | 13.2 | 0.02 |
| Viral hepatitis C | 1.3 | 1.1 | 0.02 | 1.3 | 1.1 | 0.01 |
| Visual system disorder | 21.4 | 22.6 | -0.03 | 21.5 | 21.6 | 0.00 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 7.5 | 6.9 | 0.02 | 6.9 | 7.1 | -0.01 |
| Cerebrovascular disease | 5.1 | 4.5 | 0.03 | 4.8 | 4.5 | 0.01 |
| Coronary arteriosclerosis | 13.4 | 12.1 | 0.04 | 12.5 | 12.5 | 0.00 |
| Heart disease | 33.3 | 29.6 | 0.08 | 31.1 | 30.3 | 0.02 |
| Heart failure | 11.3 | 8.0 | 0.12 | 9.4 | 8.6 | 0.03 |
| Ischemic heart disease | 8.0 | 6.7 | 0.05 | 7.2 | 7.0 | 0.01 |
| Pulmonary embolism | 1.7 | 1.8 | -0.01 | 1.7 | 1.7 | 0.00 |
| Venous thrombosis | 3.3 | 3.4 | -0.01 | 3.3 | 3.1 | 0.01 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 1.7 | 1.7 | 0.00 | 1.8 | 1.6 | 0.01 |
| Malignant lymphoma | 0.8 | 1.0 | -0.02 | 0.8 | 0.9 | -0.02 |
| Malignant neoplasm of anorectum | 0.4 | 0.5 | -0.02 | 0.3 | 0.4 | 0.00 |
| Malignant neoplastic disease | 11.8 | 13.3 | -0.05 | 12.2 | 12.5 | -0.01 |
| Malignant tumor of breast | 2.5 | 3.1 | -0.03 | 2.7 | 2.8 | -0.01 |
| Malignant tumor of colon | 0.5 | 0.6 | -0.01 | 0.5 | 0.5 | 0.01 |
| Malignant tumor of lung | 1.0 | 0.7 | 0.04 | 0.9 | 0.9 | -0.01 |
| Malignant tumor of urinary bladder | 0.3 | 0.4 | -0.02 | 0.3 | 0.3 | -0.01 |
| Primary malignant neoplasm of prostate | 0.8 | 0.8 | 0.00 | 0.9 | 0.7 | 0.02 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 37.6 | 36.5 | 0.02 | 36.9 | 36.5 | 0.01 |
| Antibacterials for systemic use | 53.0 | 51.6 | 0.03 | 52.1 | 50.8 | 0.03 |
| Antidepressants | 47.6 | 48.1 | -0.01 | 48.1 | 48.3 | 0.00 |
| Antiepileptics | 33.3 | 34.7 | -0.03 | 33.8 | 34.1 | 0.00 |
| Antiinflammatory and antirheumatic products | 47.1 | 50.6 | -0.07 | 48.8 | 49.7 | -0.02 |
| Antineoplastic agents | 39.5 | 36.8 | 0.06 | 38.1 | 38.6 | -0.01 |
| Antithrombotic agents | 47.7 | 44.7 | 0.06 | 45.4 | 44.1 | 0.03 |
| Beta blocking agents | 35.2 | 35.8 | -0.01 | 35.0 | 34.9 | 0.00 |
| Calcium channel blockers | 24.0 | 22.2 | 0.04 | 22.9 | 22.8 | 0.00 |
| Diuretics | 40.3 | 38.3 | 0.04 | 39.3 | 38.9 | 0.01 |
| Drugs for acid related disorders | 61.8 | 61.0 | 0.02 | 61.0 | 61.0 | 0.00 |
| Drugs for obstructive airway diseases | 64.7 | 52.3 | 0.25 | 58.6 | 59.1 | -0.01 |
| Drugs used in diabetes | 19.7 | 19.2 | 0.02 | 19.1 | 19.1 | 0.00 |
| Immunosuppressants | 56.0 | 53.6 | 0.05 | 55.1 | 55.5 | -0.01 |
| Lipid modifying agents | 37.0 | 36.1 | 0.02 | 36.2 | 35.9 | 0.01 |
| Opioids | 52.5 | 53.9 | -0.03 | 52.3 | 52.2 | 0.00 |
| Psycholeptics | 49.8 | 49.6 | 0.00 | 49.2 | 49.5 | -0.01 |
| Psychostimulants, agents used for adhd and nootropics | 5.6 | 6.6 | -0.04 | 6.0 | 6.3 | -0.01 |

## HCQ+AZM vs. HCQ+AMX: SIDIAP

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ+AZM | HCQ+AMX |  | HCQ+AZM | HCQ+AMX |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 20-24 | <3.8 | <0.7 | 0.09 | <2.8 | <0.7 | 0.07 |
| 30-34 | <3.8 | 4.1 | -0.10 | <2.8 | 4.0 | -0.12 |
| 35-39 | 3.8 | 5.5 | -0.08 | 6.1 | 5.4 | 0.03 |
| 40-44 | 6.2 | 6.3 | 0.00 | 3.3 | 6.1 | -0.13 |
| 45-49 | 4.6 | 6.0 | -0.06 | 5.7 | 5.8 | -0.01 |
| 50-54 | 13.1 | 8.3 | 0.16 | 17.6 | 8.3 | 0.28 |
| 55-59 | 15.4 | 10.3 | 0.15 | 17.5 | 10.5 | 0.20 |
| 60-64 | 10.8 | 12.7 | -0.06 | 12.9 | 12.9 | 0.00 |
| 65-69 | 7.7 | 12.2 | -0.15 | 5.0 | 12.5 | -0.27 |
| 70-74 | 12.3 | 11.1 | 0.04 | 10.0 | 11.0 | -0.03 |
| 75-79 | 7.7 | 8.9 | -0.04 | 4.5 | 8.6 | -0.17 |
| 80-84 | 7.7 | 8.2 | -0.02 | 9.0 | 8.3 | 0.03 |
| 85-89 | 6.2 | 3.1 | 0.15 | 4.0 | 3.3 | 0.03 |
| 90-94 | <3.8 | <0.7 | 0.09 | <2.8 | <0.7 | 0.12 |
| Gender: female | 80.0 | 77.6 | 0.06 | 79.9 | 77.9 | 0.05 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 26.9 | 20.1 | 0.16 | 29.4 | 20.6 | 0.20 |
| Chronic liver disease | <3.8 | 1.2 | -0.04 | <2.8 | 1.2 | -0.09 |
| Chronic obstructive lung disease | 4.6 | 2.6 | 0.11 | 3.7 | 2.7 | 0.05 |
| Dementia | <3.8 | 0.9 | -0.01 | <2.8 | 0.9 | -0.06 |
| Depressive disorder | <3.8 | 4.7 | -0.08 | <2.8 | 4.9 | -0.11 |
| Diabetes mellitus | <3.8 | 3.6 | -0.13 | <2.8 | 3.5 | -0.10 |
| Gastroesophageal reflux disease | <3.8 | 1.3 | 0.02 | <2.8 | 1.3 | -0.04 |
| Gastrointestinal hemorrhage | 5.4 | 2.0 | 0.18 | 5.5 | 2.1 | 0.18 |
| Hyperlipidemia | 4.6 | 6.4 | -0.08 | 3.8 | 6.3 | -0.12 |
| Hypertensive disorder | 6.2 | 7.1 | -0.04 | 6.3 | 7.0 | -0.03 |
| Obesity | 7.7 | 8.0 | -0.01 | 9.8 | 7.9 | 0.07 |
| Osteoarthritis | 4.6 | 3.8 | 0.04 | 5.2 | 3.7 | 0.07 |
| Pneumonia | <3.8 | 3.4 | -0.06 | <2.8 | 3.4 | -0.14 |
| Renal impairment | <3.8 | 2.9 | -0.04 | <2.8 | 2.8 | -0.03 |
| Rheumatoid arthritis | 20.8 | 29.3 | -0.20 | 22.9 | 28.8 | -0.13 |
| Urinary tract infectious disease | 8.5 | 10.8 | -0.08 | 5.5 | 10.8 | -0.19 |
| Viral hepatitis C | <3.8 | <0.7 | 0.02 | <2.8 | <0.7 | -0.04 |
| Visual system disorder | 17.7 | 20.8 | -0.08 | 14.6 | 20.9 | -0.16 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Cerebrovascular disease | 4.6 | 4.1 | 0.03 | 5.5 | 4.3 | 0.06 |
| Heart disease | 6.9 | 10.1 | -0.11 | 6.9 | 10.0 | -0.11 |
| Heart failure | <3.8 | 1.5 | -0.07 | <2.8 | 1.5 | -0.10 |
| Ischemic heart disease | <3.8 | 3.4 | -0.02 | <2.8 | 3.4 | -0.09 |
| Peripheral vascular disease | 8.5 | 6.4 | 0.08 | 5.8 | 6.4 | -0.02 |
| Venous thrombosis | <3.8 | <0.7 | 0.04 | <2.8 | <0.7 | -0.01 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Malignant neoplastic disease | <3.8 | 4.7 | -0.13 | <2.8 | 4.8 | -0.18 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 26.9 | 31.2 | -0.09 | 21.0 | 31.1 | -0.23 |
| Antibacterials for systemic use | 27.7 | 27.1 | 0.01 | 23.2 | 27.6 | -0.10 |
| Antidepressants | 30.8 | 28.9 | 0.04 | 33.8 | 29.2 | 0.10 |
| Antiepileptics | 16.2 | 14.0 | 0.06 | 14.3 | 14.2 | 0.00 |
| Antiinflammatory and antirheumatic products | 62.3 | 64.4 | -0.04 | 55.1 | 64.6 | -0.20 |
| Antineoplastic agents | 27.7 | 17.6 | 0.24 | 18.1 | 19.1 | -0.03 |
| Antipsoriatics | <3.8 | 1.2 | -0.04 | <2.8 | 1.1 | 0.08 |
| Antithrombotic agents | 20.8 | 25.2 | -0.11 | 22.5 | 25.0 | -0.06 |
| Beta blocking agents | 15.4 | 15.0 | 0.01 | 15.3 | 14.9 | 0.01 |
| Calcium channel blockers | 9.2 | 9.8 | -0.02 | 10.1 | 9.5 | 0.02 |
| Diuretics | 30.0 | 29.3 | 0.02 | 30.3 | 29.3 | 0.02 |
| Drugs for acid related disorders | 89.2 | 83.2 | 0.18 | 82.0 | 83.9 | -0.05 |
| Drugs for obstructive airway diseases | 48.5 | 38.9 | 0.19 | 34.3 | 41.2 | -0.14 |
| Drugs used in diabetes | 11.5 | 14.7 | -0.09 | 11.8 | 14.5 | -0.08 |
| Immunosuppressants | 37.7 | 29.4 | 0.18 | 26.9 | 30.8 | -0.08 |
| Lipid modifying agents | 26.9 | 27.4 | -0.01 | 27.1 | 27.4 | -0.01 |
| Opioids | 16.2 | 22.2 | -0.15 | 13.2 | 22.5 | -0.24 |
| Psycholeptics | 43.8 | 41.3 | 0.05 | 41.1 | 41.6 | -0.01 |
| Psychostimulants, agents used for adhd and nootropics | 5.4 | 2.5 | 0.15 | 3.6 | 2.5 | 0.06 |

## HCQ+AZM vs. HCQ+AMX: VA

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Before stratification |  |  | After stratification |  |  |
|  | HCQ+AZM | HCQ+AMX |  | HCQ+AZM | HCQ+AMX |  |
| Characteristic | % | % | Std. diff | % | % | Std. diff |
| Age group |  |  |  |  |  |  |
| 20-24 | <0.1 | 0.1 | 0.00 | <0.1 | 0.1 | 0.00 |
| 25-29 | 0.4 | 0.2 | 0.03 | 0.4 | 0.3 | 0.03 |
| 30-34 | 1.0 | 1.0 | 0.00 | 1.2 | 1.1 | 0.02 |
| 35-39 | 1.3 | 1.5 | -0.02 | 1.3 | 1.4 | -0.01 |
| 40-44 | 2.5 | 2.8 | -0.02 | 3.1 | 2.7 | 0.02 |
| 45-49 | 4.9 | 5.5 | -0.03 | 5.9 | 5.4 | 0.02 |
| 50-54 | 8.8 | 9.1 | -0.01 | 9.6 | 9.0 | 0.02 |
| 55-59 | 13.4 | 14.6 | -0.03 | 12.9 | 14.3 | -0.04 |
| 60-64 | 17.6 | 17.2 | 0.01 | 17.1 | 18.0 | -0.02 |
| 65-69 | 18.2 | 17.5 | 0.02 | 17.2 | 17.0 | 0.00 |
| 70-74 | 13.7 | 13.9 | -0.01 | 14.5 | 14.2 | 0.01 |
| 75-79 | 8.9 | 8.6 | 0.01 | 8.2 | 8.6 | -0.01 |
| 80-84 | 5.7 | 5.4 | 0.02 | 5.4 | 5.2 | 0.00 |
| 85-89 | 2.9 | 2.0 | 0.05 | 2.5 | 2.0 | 0.03 |
| 90-94 | 0.6 | 0.5 | 0.02 | 0.5 | 0.6 | -0.01 |
| 95-99 | <0.1 | <0.1 | 0.01 | <0.1 | <0.1 | 0.00 |
| Gender: female | 18.6 | 16.7 | 0.05 | 18.7 | 17.5 | 0.03 |
| Race |  |  |  |  |  |  |
| race = Asian | 0.4 | 0.3 | 0.01 | 0.3 | 0.3 | 0.01 |
| race = Black or African American | 16.5 | 17.8 | -0.04 | 17.0 | 17.7 | -0.02 |
| race = White | 74.0 | 71.1 | 0.06 | 73.2 | 71.8 | 0.03 |
| race = Unknown | 7.7 | 8.9 | -0.04 | 8.0 | 8.4 | -0.02 |
| race = Native Hawaiian or Other Pacific Islander | 0.6 | 0.8 | -0.02 | 0.7 | 0.8 | -0.01 |
| race = American Indian or Alaska Native | 0.8 | 1.1 | -0.02 | 0.8 | 1.0 | -0.02 |
| Ethnicity |  |  |  |  |  |  |
| ethnicity = Hispanic or Latino | 4.7 | 5.2 | -0.02 | 3.9 | 4.8 | -0.04 |
| ethnicity = Not Hispanic or Latino | 91.1 | 89.3 | 0.06 | 91.6 | 89.9 | 0.06 |
| Medical history: General |  |  |  |  |  |  |
| Acute respiratory disease | 48.2 | 29.9 | 0.38 | 40.3 | 40.4 | 0.00 |
| Attention deficit hyperactivity disorder | 0.4 | 0.6 | -0.04 | 0.4 | 0.6 | -0.03 |
| Chronic liver disease | 3.7 | 4.6 | -0.04 | 3.7 | 4.2 | -0.03 |
| Chronic obstructive lung disease | 33.7 | 22.5 | 0.25 | 26.1 | 27.6 | -0.03 |
| Crohn's disease | 0.4 | 0.4 | 0.00 | 0.4 | 0.3 | 0.02 |
| Depressive disorder | 28.4 | 27.9 | 0.01 | 29.5 | 28.5 | 0.02 |
| Diabetes mellitus | 27.4 | 29.5 | -0.05 | 28.0 | 28.2 | 0.00 |
| Gastroesophageal reflux disease | 7.2 | 8.0 | -0.03 | 7.4 | 7.7 | -0.01 |
| Gastrointestinal hemorrhage | 3.2 | 3.7 | -0.03 | 3.8 | 3.2 | 0.03 |
| Human immunodeficiency virus infection | 0.3 | 0.4 | -0.02 | 0.3 | 0.4 | -0.02 |
| Hyperlipidemia | 48.8 | 46.6 | 0.04 | 47.0 | 47.0 | 0.00 |
| Hypertensive disorder | 64.7 | 63.3 | 0.03 | 63.8 | 63.3 | 0.01 |
| Lesion of liver | 1.5 | 1.9 | -0.03 | 1.7 | 1.9 | -0.02 |
| Obesity | 18.4 | 18.4 | 0.00 | 17.8 | 18.5 | -0.02 |
| Osteoarthritis | 42.8 | 43.8 | -0.02 | 42.6 | 42.9 | 0.00 |
| Pneumonia | 18.2 | 7.9 | 0.31 | 12.9 | 11.4 | 0.04 |
| Psoriasis | 2.4 | 2.5 | 0.00 | 2.5 | 2.2 | 0.02 |
| Renal impairment | 11.9 | 11.8 | 0.00 | 11.4 | 11.2 | 0.01 |
| Rheumatoid arthritis | 87.3 | 86.0 | 0.04 | 86.0 | 86.7 | -0.02 |
| Schizophrenia | 0.7 | 1.1 | -0.04 | 1.1 | 1.1 | 0.00 |
| Ulcerative colitis | 0.4 | 0.5 | -0.02 | 0.5 | 0.4 | 0.01 |
| Urinary tract infectious disease | 5.9 | 8.3 | -0.09 | 7.4 | 7.2 | 0.01 |
| Visual system disorder | 65.7 | 65.2 | 0.01 | 65.2 | 64.9 | 0.01 |
| Medical history: Cardiovascular disease |  |  |  |  |  |  |
| Atrial fibrillation | 7.4 | 8.3 | -0.03 | 7.9 | 8.1 | -0.01 |
| Cerebrovascular disease | 6.1 | 5.6 | 0.02 | 6.1 | 5.4 | 0.03 |
| Coronary arteriosclerosis | 19.5 | 18.3 | 0.03 | 18.6 | 18.0 | 0.02 |
| Heart disease | 39.8 | 38.2 | 0.03 | 38.7 | 37.7 | 0.02 |
| Heart failure | 11.8 | 9.9 | 0.06 | 11.3 | 10.2 | 0.04 |
| Ischemic heart disease | 15.7 | 15.2 | 0.01 | 15.2 | 15.1 | 0.00 |
| Peripheral vascular disease | 17.6 | 18.4 | -0.02 | 18.1 | 18.0 | 0.00 |
| Pulmonary embolism | 1.5 | 1.6 | -0.01 | 1.7 | 1.5 | 0.02 |
| Venous thrombosis | 2.3 | 2.5 | -0.01 | 2.4 | 2.2 | 0.01 |
| Medical history: Neoplasms |  |  |  |  |  |  |
| Hematologic neoplasm | 1.8 | 2.2 | -0.03 | 1.9 | 2.2 | -0.02 |
| Malignant lymphoma | 1.2 | 1.3 | -0.01 | 1.2 | 1.2 | 0.00 |
| Malignant neoplasm of anorectum | 0.2 | 0.2 | 0.00 | 0.1 | 0.1 | 0.00 |
| Malignant neoplastic disease | 16.3 | 16.4 | 0.00 | 17.1 | 16.0 | 0.03 |
| Malignant tumor of breast | 0.8 | 0.4 | 0.06 | 0.8 | 0.4 | 0.05 |
| Malignant tumor of colon | 0.6 | 0.8 | -0.03 | 0.5 | 0.7 | -0.03 |
| Malignant tumor of lung | 1.1 | 1.0 | 0.00 | 1.0 | 1.2 | -0.02 |
| Malignant tumor of urinary bladder | 1.2 | 1.1 | 0.00 | 1.3 | 1.1 | 0.02 |
| Primary malignant neoplasm of prostate | 4.6 | 5.0 | -0.02 | 5.0 | 4.9 | 0.01 |
| Medication use |  |  |  |  |  |  |
| Agents acting on the renin-angiotensin system | 45.4 | 45.3 | 0.00 | 44.8 | 44.9 | 0.00 |
| Antiepileptics | 29.8 | 31.3 | -0.03 | 32.1 | 30.4 | 0.04 |
| Antiinflammatory and antirheumatic products | 49.5 | 51.7 | -0.04 | 51.6 | 51.5 | 0.00 |
| Antineoplastic agents | 45.5 | 39.0 | 0.13 | 41.5 | 42.1 | -0.01 |
| Antipsoriatics | 1.8 | 1.6 | 0.02 | 2.2 | 1.4 | 0.06 |
| Antithrombotic agents | 45.3 | 45.3 | 0.00 | 45.7 | 43.9 | 0.04 |
| Beta blocking agents | 40.4 | 41.4 | -0.02 | 41.0 | 40.2 | 0.02 |
| Calcium channel blockers | 27.4 | 27.6 | -0.01 | 28.2 | 27.0 | 0.03 |
| Diuretics | 42.4 | 41.4 | 0.02 | 42.3 | 41.3 | 0.02 |
| Drugs for acid related disorders | 71.1 | 70.4 | 0.01 | 71.1 | 70.3 | 0.02 |
| Drugs for obstructive airway diseases | 57.5 | 41.7 | 0.32 | 48.3 | 49.0 | -0.01 |
| Drugs used in diabetes | 23.1 | 25.1 | -0.05 | 24.4 | 23.9 | 0.01 |
| Immunosuppressants | 58.8 | 52.8 | 0.12 | 54.7 | 55.5 | -0.02 |
| Lipid modifying agents | 51.9 | 49.9 | 0.04 | 50.4 | 49.7 | 0.01 |
| Opioids | 43.7 | 46.6 | -0.06 | 45.3 | 44.1 | 0.02 |
| Psycholeptics | 35.3 | 36.3 | -0.02 | 36.2 | 35.7 | 0.01 |
| Psychostimulants, agents used for adhd and nootropics | 2.7 | 2.9 | -0.02 | 2.9 | 2.9 | 0.00 |