# **Event counts and incidence rates after PS stratification**

## HCQ vs. SSZ: All-cause mortality (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CPRD | 9,127 | 11,398 | 747 | 934 | 6 | 5 | 8.03 | 5.35 |
| IMRD | 8,851 | 8,460 | 723 | 692 | <5 | 6 | <6.91 | 8.66 |
| Optum | 51,280 | 17,389 | 4,161 | 1,411 | 20 | 10 | 4.81 | 7.09 |
| SIDIAP | 1,247 | 381 | 102 | 31 | 0 | 0 | 0.00 | 0.00 |
| VA | 32,028 | 14,349 | 2,627 | 1,176 | 45 | 17 | 17.13 | 14.45 |
| Meta-analysis | 101,286 | 51,596 | 8,259 | 4,215 | <76 | 38 | <9.20 | 9.02 |

## HCQ vs. SSZ: Cardiovascular-related mortality (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CPRD | 9,127 | 11,398 | 747 | 934 | 0 | 0 | 0.00 | 0.00 |
| IMRD | 8,852 | 8,460 | 723 | 692 | 0 | 0 | 0.00 | 0.00 |
| Optum | 51,280 | 17,389 | 4,161 | 1,411 | 16 | <5 | 3.85 | <3.54 |
| SIDIAP | 1,247 | 381 | 102 | 31 | 0 | 0 | 0.00 | 0.00 |
| VA | 32,028 | 14,349 | 2,627 | 1,176 | 9 | <5 | 3.43 | <4.25 |
| Meta-analysis | 83,308 | 31,738 | 6,788 | 2,588 | 25 | <10 | 3.68 | <3.86 |

## HCQ vs. SSZ: Myocardial infarction (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CCAE | 66,630 | 22,374 | 5,412 | 1,817 | 29 | 11 | 5.36 | 6.05 |
| JMDC | 241 | 2,099 | 19 | 171 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,079 | 2,196 | 658 | 178 | 13 | 5 | 19.75 | 27.98 |
| MDCR | 15,827 | 5,190 | 1,289 | 422 | 26 | 10 | 20.17 | 23.68 |
| OpenClaims | 620,751 | 183,482 | 50,960 | 15,063 | 369 | 89 | 7.24 | 5.91 |
| Optum | 51,244 | 17,380 | 4,156 | 1,409 | 51 | 20 | 12.27 | 14.19 |
| PanTher | 78,424 | 21,885 | 6,353 | 1,772 | 59 | 12 | 9.29 | 6.77 |
| VA | 32,009 | 14,342 | 2,624 | 1,175 | 30 | 9 | 11.43 | 7.65 |
| Meta-analysis | 872,964 | 266,849 | 71,454 | 21,840 | 577 | 156 | 8.08 | 7.14 |

## HCQ vs. SSZ: Chest pain or angina (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| AmbEMR | 57,140 | 15,268 | 4,684 | 1,251 | 122 | 31 | 26.04 | 24.76 |
| CCAE | 65,935 | 22,173 | 5,338 | 1,795 | 440 | 143 | 82.41 | 79.62 |
| CPRD | 9,114 | 11,388 | 746 | 933 | 10 | 17 | 13.40 | 18.22 |
| DAGermany | 3,884 | 5,045 | 318 | 414 | <5 | 5 | <15.69 | 12.07 |
| IMRD | 8,843 | 8,452 | 722 | 691 | 9 | 10 | 12.45 | 14.46 |
| JMDC | 238 | 2,092 | 19 | 170 | <5 | 5 | <258.53 | 29.33 |
| MDCD | 7,982 | 2,177 | 647 | 176 | 80 | 23 | 123.50 | 130.43 |
| MDCR | 15,690 | 5,150 | 1,274 | 417 | 129 | 49 | 101.25 | 117.43 |
| OpenClaims | 617,628 | 182,776 | 50,613 | 14,977 | 2,674 | 804 | 52.83 | 53.68 |
| Optum | 50,698 | 17,221 | 4,098 | 1,390 | 396 | 166 | 96.62 | 119.34 |
| PanTher | 76,844 | 21,549 | 6,199 | 1,738 | 629 | 143 | 101.46 | 82.23 |
| SIDIAP | 1,245 | 381 | 101 | 31 | <5 | <5 | <49.03 | <160.18 |
| VA | 31,824 | 14,276 | 2,605 | 1,168 | 130 | 54 | 49.89 | 46.20 |
| Meta-analysis | 945,582 | 305,475 | 77,249 | 24,956 | <4,624 | 1,445 | <59.86 | 57.90 |

## HCQ vs. SSZ: Heart failure (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| AmbEMR | 57,383 | 15,305 | 4,707 | 1,255 | 42 | 10 | 8.92 | 7.96 |
| CCAE | 66,604 | 22,370 | 5,410 | 1,817 | 30 | 5 | 5.55 | 2.75 |
| CPRD | 9,126 | 11,397 | 747 | 934 | <5 | <5 | <6.69 | <5.35 |
| DAGermany | 3,885 | 5,042 | 318 | 413 | <5 | <5 | <15.68 | <12.08 |
| IMRD | 8,852 | 8,460 | 723 | 692 | <5 | <5 | <6.91 | <7.22 |
| JMDC | 239 | 2,093 | 19 | 170 | <5 | <5 | <257.18 | <29.30 |
| MDCD | 8,072 | 2,195 | 657 | 178 | 15 | <5 | 22.81 | <27.99 |
| MDCR | 15,808 | 5,171 | 1,287 | 420 | 39 | 19 | 30.30 | 45.22 |
| OpenClaims | 620,244 | 183,350 | 50,903 | 15,048 | 749 | 214 | 14.71 | 14.22 |
| Optum | 51,204 | 17,356 | 4,151 | 1,407 | 84 | 25 | 20.23 | 17.76 |
| PanTher | 77,813 | 21,768 | 6,295 | 1,761 | 237 | 50 | 37.64 | 28.39 |
| SIDIAP | 1,246 | 381 | 102 | 31 | <5 | 0 | <48.91 | 0.00 |
| VA | 31,895 | 14,307 | 2,614 | 1,172 | 56 | 17 | 21.42 | 14.49 |
| Meta-analysis | 950,886 | 306,721 | 77,817 | 25,102 | <1,267 | <360 | <16.28 | <14.34 |

## HCQ vs. SSZ: Cardiovascular events (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CCAE | 66,533 | 22,357 | 5,401 | 1,815 | 97 | 36 | 17.96 | 19.83 |
| JMDC | 238 | 2,097 | 19 | 171 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,041 | 2,186 | 654 | 177 | 35 | 11 | 53.50 | 61.95 |
| MDCR | 15,759 | 5,167 | 1,280 | 419 | 117 | 39 | 91.39 | 93.05 |
| OpenClaims | 619,493 | 183,209 | 50,809 | 15,027 | 1,636 | 470 | 32.20 | 31.28 |
| Optum | 51,095 | 17,340 | 4,138 | 1,404 | 215 | 76 | 51.96 | 54.11 |
| PanTher | 77,825 | 21,752 | 6,295 | 1,759 | 294 | 70 | 46.70 | 39.79 |
| VA | 31,913 | 14,300 | 2,613 | 1,171 | 120 | 46 | 45.92 | 39.28 |
| Meta-analysis | 870,659 | 266,311 | 71,192 | 21,774 | 2,514 | 748 | 35.31 | 34.35 |

## HCQ vs. SSZ: Cardiac arrhythmia (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| AmbEMR | 56,743 | 15,208 | 4,650 | 1,246 | 147 | 43 | 31.61 | 34.50 |
| CCAE | 66,430 | 22,337 | 5,391 | 1,812 | 153 | 58 | 28.38 | 32.00 |
| CPRD | 9,120 | 11,390 | 746 | 933 | 7 | 14 | 9.38 | 15.00 |
| DAGermany | 3,883 | 5,040 | 318 | 413 | <5 | 5 | <15.70 | 12.09 |
| IMRD | 8,847 | 8,452 | 723 | 691 | 8 | 12 | 11.06 | 17.35 |
| JMDC | 241 | 2,094 | 19 | 170 | 0 | <5 | 0.00 | <29.30 |
| MDCD | 8,051 | 2,191 | 655 | 178 | 37 | 10 | 56.48 | 56.15 |
| MDCR | 15,763 | 5,165 | 1,282 | 419 | 73 | 24 | 56.93 | 57.20 |
| OpenClaims | 619,285 | 183,147 | 50,795 | 15,020 | 1,505 | 490 | 29.63 | 32.62 |
| Optum | 51,069 | 17,320 | 4,137 | 1,403 | 159 | 61 | 38.43 | 43.46 |
| PanTher | 77,008 | 21,581 | 6,219 | 1,743 | 472 | 115 | 75.89 | 65.97 |
| VA | 31,766 | 14,275 | 2,601 | 1,169 | 107 | 45 | 41.12 | 38.48 |
| Meta-analysis | 947,965 | 306,106 | 77,520 | 25,032 | <2,673 | 877 | <34.48 | 35.03 |

## HCQ vs. SSZ: Bradycardia (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| AmbEMR | 57,594 | 15,350 | 4,725 | 1,259 | 17 | <5 | 3.60 | <3.97 |
| CCAE | 66,640 | 22,373 | 5,414 | 1,817 | 5 | <5 | 0.92 | <2.75 |
| CPRD | 9,127 | 11,398 | 747 | 934 | 0 | 0 | 0.00 | 0.00 |
| DAGermany | 3,887 | 5,047 | 319 | 414 | 0 | 0 | 0.00 | 0.00 |
| IMRD | 8,852 | 8,460 | 723 | 692 | 0 | 0 | 0.00 | 0.00 |
| JMDC | 241 | 2,099 | 19 | 171 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,085 | 2,197 | 659 | 178 | 6 | <5 | 9.10 | <27.96 |
| MDCR | 15,830 | 5,190 | 1,290 | 422 | 8 | 0 | 6.20 | 0.00 |
| OpenClaims | 620,919 | 183,510 | 50,982 | 15,067 | 155 | 56 | 3.04 | 3.72 |
| Optum | 51,259 | 17,386 | 4,158 | 1,410 | 23 | <5 | 5.53 | <3.54 |
| PanTher | 78,425 | 21,911 | 6,352 | 1,774 | 62 | 16 | 9.76 | 9.02 |
| VA | 32,018 | 14,345 | 2,626 | 1,176 | 9 | <5 | 3.43 | <4.25 |
| Meta-analysis | 914,940 | 277,072 | 74,919 | 22,684 | 277 | <97 | 3.70 | <4.28 |

## HCQ vs. SSZ: Transient ischemic attack (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CCAE | 66,617 | 22,372 | 5,411 | 1,817 | 23 | 6 | 4.25 | 3.30 |
| JMDC | 241 | 2,099 | 19 | 171 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,078 | 2,198 | 658 | 178 | 7 | <5 | 10.63 | <27.96 |
| MDCR | 15,821 | 5,187 | 1,289 | 422 | 17 | 7 | 13.19 | 16.59 |
| OpenClaims | 620,812 | 183,511 | 50,969 | 15,067 | 261 | 56 | 5.12 | 3.72 |
| Optum | 51,235 | 17,377 | 4,156 | 1,409 | 38 | 9 | 9.14 | 6.38 |
| PanTher | 78,520 | 21,921 | 6,362 | 1,775 | 26 | 7 | 4.09 | 3.94 |
| VA | 32,010 | 14,346 | 2,625 | 1,176 | 10 | 5 | 3.81 | 4.25 |
| Meta-analysis | 873,093 | 266,912 | 71,472 | 21,847 | 382 | <95 | 5.34 | <4.35 |

## HCQ vs. SSZ: Stroke (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CCAE | 66,619 | 22,374 | 5,411 | 1,817 | 26 | 8 | 4.80 | 4.40 |
| JMDC | 238 | 2,098 | 19 | 171 | 0 | <5 | 0.00 | <29.22 |
| MDCD | 8,073 | 2,196 | 657 | 178 | 13 | <5 | 19.76 | <27.98 |
| MDCR | 15,825 | 5,186 | 1,289 | 421 | 29 | 9 | 22.50 | 21.34 |
| OpenClaims | 620,748 | 183,482 | 50,960 | 15,063 | 383 | 98 | 7.52 | 6.51 |
| Optum | 51,239 | 17,376 | 4,156 | 1,409 | 41 | 12 | 9.86 | 8.51 |
| PanTher | 78,442 | 21,897 | 6,354 | 1,773 | 52 | 10 | 8.18 | 5.64 |
| VA | 32,008 | 14,341 | 2,625 | 1,175 | 19 | 8 | 7.24 | 6.80 |
| Meta-analysis | 872,954 | 266,852 | 71,455 | 21,840 | 563 | <150 | 7.88 | <6.87 |

## HCQ vs. SSZ: Venous thromboembolism (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| AmbEMR | 57,262 | 15,281 | 4,697 | 1,253 | 52 | 17 | 11.07 | 13.56 |
| CCAE | 66,528 | 22,358 | 5,402 | 1,815 | 70 | 23 | 12.96 | 12.67 |
| CPRD | 9,118 | 11,390 | 746 | 933 | <5 | 11 | <6.70 | 11.79 |
| DAGermany | 3,881 | 5,033 | 318 | 413 | <5 | 6 | <15.70 | 14.53 |
| IMRD | 8,841 | 8,455 | 722 | 692 | 5 | 10 | 6.92 | 14.45 |
| JMDC | 238 | 2,097 | 19 | 170 | 0 | <5 | 0.00 | <29.25 |
| MDCD | 8,059 | 2,196 | 656 | 178 | 24 | <5 | 36.57 | <27.98 |
| MDCR | 15,780 | 5,176 | 1,285 | 421 | 41 | 8 | 31.90 | 18.99 |
| OpenClaims | 620,093 | 183,330 | 50,889 | 15,045 | 788 | 237 | 15.48 | 15.75 |
| Optum | 51,153 | 17,355 | 4,146 | 1,407 | 104 | 31 | 25.08 | 22.03 |
| PanTher | 78,092 | 21,804 | 6,317 | 1,764 | 241 | 52 | 38.15 | 29.47 |
| SIDIAP | 1,246 | 381 | 102 | 31 | 0 | 0 | 0.00 | 0.00 |
| VA | 31,962 | 14,328 | 2,620 | 1,174 | 42 | 22 | 16.03 | 18.73 |
| Meta-analysis | 950,769 | 306,706 | 77,802 | 25,099 | <1,377 | <422 | <17.70 | <16.81 |

## HCQ vs. SSZ: Gastrointestinal bleeding (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CCAE | 66,621 | 22,357 | 5,410 | 1,816 | 40 | 12 | 7.39 | 6.61 |
| JMDC | 240 | 2,096 | 19 | 170 | <5 | <5 | <256.39 | <29.28 |
| MDCD | 8,071 | 2,191 | 657 | 178 | 16 | <5 | 24.33 | <28.05 |
| MDCR | 15,813 | 5,177 | 1,288 | 421 | 31 | 7 | 24.06 | 16.62 |
| OpenClaims | 620,631 | 183,371 | 50,948 | 15,052 | 438 | 126 | 8.60 | 8.37 |
| Optum | 51,218 | 17,345 | 4,153 | 1,407 | 68 | 13 | 16.37 | 9.24 |
| PanTher | 78,411 | 21,890 | 6,351 | 1,772 | 78 | 18 | 12.28 | 10.15 |
| VA | 31,993 | 14,334 | 2,623 | 1,174 | 26 | 16 | 9.91 | 13.62 |
| Meta-analysis | 872,758 | 266,665 | 71,434 | 21,823 | 697 | <197 | 9.76 | <9.03 |

## HCQ vs. SSZ: Acute renal failure (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CCAE | 66,584 | 22,362 | 5,407 | 1,816 | 72 | 27 | 13.32 | 14.87 |
| JMDC | 241 | 2,099 | 19 | 171 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,051 | 2,189 | 654 | 177 | 41 | 13 | 62.61 | 73.10 |
| MDCR | 15,797 | 5,181 | 1,285 | 421 | 60 | 17 | 46.67 | 40.37 |
| OpenClaims | 620,101 | 183,354 | 50,881 | 15,045 | 1,061 | 308 | 20.85 | 20.47 |
| Optum | 51,166 | 17,353 | 4,145 | 1,406 | 163 | 54 | 39.32 | 38.39 |
| PanTher | 78,010 | 21,797 | 6,315 | 1,764 | 186 | 42 | 29.45 | 23.81 |
| VA | 31,947 | 14,317 | 2,616 | 1,172 | 102 | 35 | 38.98 | 29.84 |
| Meta-analysis | 871,656 | 266,553 | 71,307 | 21,803 | 1,685 | 496 | 23.63 | 22.75 |

## HCQ vs. SSZ: End stage renal disease (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| AmbEMR | 57,647 | 15,355 | 4,731 | 1,260 | 0 | 0 | 0.00 | 0.00 |
| CCAE | 66,641 | 22,378 | 5,414 | 1,817 | <5 | <5 | <0.92 | <2.75 |
| CPRD | 9,127 | 11,398 | 747 | 934 | 0 | 0 | 0.00 | 0.00 |
| DAGermany | 3,887 | 5,047 | 319 | 414 | 0 | 0 | 0.00 | 0.00 |
| IMRD | 8,852 | 8,460 | 723 | 692 | 0 | 0 | 0.00 | 0.00 |
| JMDC | 241 | 2,099 | 19 | 171 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,087 | 2,198 | 659 | 178 | 0 | 0 | 0.00 | 0.00 |
| MDCR | 15,838 | 5,191 | 1,291 | 422 | <5 | <5 | <3.87 | <11.83 |
| OpenClaims | 621,009 | 183,543 | 50,993 | 15,071 | 70 | 8 | 1.37 | 0.53 |
| Optum | 51,271 | 17,389 | 4,160 | 1,411 | 7 | <5 | 1.68 | <3.54 |
| PanTher | 78,526 | 21,924 | 6,362 | 1,776 | 27 | <5 | 4.24 | <2.82 |
| SIDIAP | 1,247 | 381 | 102 | 31 | 0 | 0 | 0.00 | 0.00 |
| VA | 32,020 | 14,348 | 2,626 | 1,176 | 5 | <5 | 1.90 | <4.25 |
| Meta-analysis | 865,305 | 264,773 | 70,848 | 21,676 | <119 | <33 | <1.68 | <1.52 |

## HCQ vs. SSZ: Hepatic failure (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| AmbEMR | 57,658 | 15,358 | 4,732 | 1,260 | 0 | 0 | 0.00 | 0.00 |
| CCAE | 66,638 | 22,378 | 5,413 | 1,818 | 6 | <5 | 1.11 | <2.75 |
| CPRD | 9,127 | 11,398 | 747 | 934 | 0 | 0 | 0.00 | 0.00 |
| DAGermany | 3,887 | 5,047 | 319 | 414 | 0 | 0 | 0.00 | 0.00 |
| IMRD | 8,852 | 8,460 | 723 | 692 | 0 | 0 | 0.00 | 0.00 |
| JMDC | 241 | 2,099 | 19 | 171 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,085 | 2,198 | 659 | 178 | <5 | <5 | <7.58 | <27.95 |
| MDCR | 15,841 | 5,189 | 1,291 | 422 | 0 | 0 | 0.00 | 0.00 |
| OpenClaims | 621,042 | 183,551 | 50,997 | 15,071 | 42 | 23 | 0.82 | 1.53 |
| Optum | 51,267 | 17,387 | 4,159 | 1,410 | 13 | <5 | 3.13 | <3.54 |
| PanTher | 78,529 | 21,916 | 6,363 | 1,775 | 32 | 9 | 5.03 | 5.07 |
| SIDIAP | 1,247 | 381 | 102 | 31 | 0 | 0 | 0.00 | 0.00 |
| VA | 32,025 | 14,348 | 2,627 | 1,176 | 5 | <5 | 1.90 | <4.25 |
| Meta-analysis | 857,586 | 261,778 | 70,220 | 21,431 | <103 | <52 | <1.47 | <2.43 |

## HCQ vs. SSZ: Acute pancreatitis (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CCAE | 66,637 | 22,374 | 5,413 | 1,817 | 22 | 7 | 4.06 | 3.85 |
| JMDC | 241 | 2,099 | 19 | 171 | 0 | <5 | 0.00 | <29.22 |
| MDCD | 8,077 | 2,196 | 658 | 178 | 10 | <5 | 15.19 | <27.97 |
| MDCR | 15,833 | 5,188 | 1,290 | 422 | 6 | <5 | 4.65 | <11.84 |
| OpenClaims | 620,956 | 183,525 | 50,985 | 15,068 | 155 | 50 | 3.04 | 3.32 |
| Optum | 51,259 | 17,384 | 4,158 | 1,410 | 21 | 9 | 5.05 | 6.38 |
| PanTher | 78,522 | 21,921 | 6,363 | 1,775 | 21 | 5 | 3.30 | 2.82 |
| VA | 32,023 | 14,347 | 2,626 | 1,176 | 12 | <5 | 4.57 | <4.25 |
| Meta-analysis | 873,307 | 266,935 | 71,496 | 21,850 | 247 | <86 | 3.45 | <3.94 |

## HCQ vs. SSZ: All-cause mortality (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CPRD | 9,127 | 11,398 | 18,045 | 26,519 | 253 | 386 | 14.02 | 14.56 |
| IMRD | 8,851 | 8,460 | 17,370 | 18,944 | 214 | 241 | 12.32 | 12.72 |
| Optum | 51,280 | 17,389 | 53,327 | 12,476 | 527 | 66 | 9.88 | 5.29 |
| SIDIAP | 1,247 | 381 | 1,344 | 430 | 8 | <5 | 5.95 | <11.63 |
| VA | 32,028 | 14,349 | 55,314 | 17,537 | 1,356 | 327 | 24.51 | 18.65 |
| Meta-analysis | 101,286 | 51,596 | 144,058 | 75,478 | 2,350 | 1,020 | 16.31 | 13.51 |

## HCQ vs. SSZ: Cardiovascular-related mortality (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CPRD | 9,127 | 11,398 | 18,045 | 26,519 | 7 | 25 | 0.39 | 0.94 |
| IMRD | 8,852 | 8,460 | 17,375 | 18,950 | 0 | 0 | 0.00 | 0.00 |
| Optum | 51,280 | 17,389 | 53,331 | 12,476 | 234 | 25 | 4.39 | 2.00 |
| SIDIAP | 1,247 | 381 | 1,344 | 430 | 0 | 0 | 0.00 | 0.00 |
| VA | 32,028 | 14,349 | 55,314 | 17,537 | 315 | 65 | 5.69 | 3.71 |
| Meta-analysis | 92,435 | 43,136 | 126,690 | 56,533 | 556 | 115 | 4.39 | 2.03 |

## HCQ vs. SSZ: Myocardial infarction (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CCAE | 66,630 | 22,374 | 65,865 | 14,613 | 240 | 48 | 3.64 | 3.28 |
| JMDC | 241 | 2,099 | 255 | 1,715 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,079 | 2,196 | 5,796 | 1,229 | 83 | 14 | 14.32 | 11.39 |
| MDCR | 15,827 | 5,190 | 18,021 | 3,989 | 287 | 70 | 15.93 | 17.55 |
| OpenClaims | 620,751 | 183,482 | 863,192 | 171,694 | 5,396 | 956 | 6.25 | 5.57 |
| Optum | 51,244 | 17,380 | 52,823 | 12,331 | 517 | 121 | 9.79 | 9.81 |
| VA | 32,009 | 14,342 | 54,743 | 17,353 | 395 | 137 | 7.22 | 7.89 |
| Meta-analysis | 794,540 | 244,964 | 1,060,442 | 221,212 | 6,918 | 1,346 | 6.52 | 6.08 |

## HCQ vs. SSZ: Chest pain or angina (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| AmbEMR | 57,140 | 15,268 | 18,452 | 5,631 | 451 | 112 | 24.44 | 19.89 |
| CCAE | 65,935 | 22,173 | 60,983 | 13,775 | 3,354 | 810 | 55.00 | 58.80 |
| CPRD | 9,114 | 11,388 | 17,340 | 25,145 | 260 | 422 | 14.99 | 16.78 |
| DAGermany | 3,884 | 5,045 | 2,508 | 3,507 | 31 | 36 | 12.36 | 10.26 |
| IMRD | 8,843 | 8,452 | 16,780 | 18,027 | 235 | 293 | 14.00 | 16.25 |
| JMDC | 238 | 2,092 | 247 | 1,686 | 5 | 31 | 20.23 | 18.38 |
| MDCD | 7,982 | 2,177 | 5,346 | 1,165 | 467 | 100 | 87.34 | 85.81 |
| MDCR | 15,690 | 5,150 | 16,502 | 3,714 | 1,178 | 279 | 71.38 | 75.12 |
| OpenClaims | 617,628 | 182,776 | 807,394 | 162,642 | 31,161 | 6,198 | 38.59 | 38.11 |
| Optum | 50,698 | 17,221 | 48,159 | 11,437 | 3,185 | 829 | 66.13 | 72.48 |
| SIDIAP | 1,245 | 381 | 1,315 | 425 | 28 | <5 | 21.29 | <11.75 |
| VA | 31,824 | 14,276 | 50,773 | 16,375 | 1,822 | 611 | 35.88 | 37.31 |
| Meta-analysis | 868,738 | 283,926 | 1,044,240 | 261,422 | 42,144 | 9,690 | 40.36 | 37.07 |

## HCQ vs. SSZ: Heart failure (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| AmbEMR | 57,383 | 15,305 | 18,647 | 5,656 | 182 | 53 | 9.76 | 9.37 |
| CCAE | 66,604 | 22,370 | 65,772 | 14,581 | 305 | 74 | 4.64 | 5.07 |
| CPRD | 9,126 | 11,397 | 18,014 | 26,442 | 16 | 36 | 0.89 | 1.36 |
| DAGermany | 3,885 | 5,042 | 2,561 | 3,535 | 11 | 22 | 4.29 | 6.22 |
| IMRD | 8,852 | 8,460 | 17,344 | 18,905 | 15 | 21 | 0.86 | 1.11 |
| JMDC | 239 | 2,093 | 246 | 1,693 | <5 | 18 | <20.27 | 10.63 |
| MDCD | 8,072 | 2,195 | 5,742 | 1,216 | 118 | 28 | 20.55 | 23.02 |
| MDCR | 15,808 | 5,171 | 17,689 | 3,885 | 586 | 141 | 33.13 | 36.29 |
| OpenClaims | 620,244 | 183,350 | 852,570 | 169,864 | 12,246 | 2,246 | 14.36 | 13.22 |
| Optum | 51,204 | 17,356 | 52,137 | 12,248 | 915 | 207 | 17.55 | 16.90 |
| SIDIAP | 1,246 | 381 | 1,336 | 430 | <5 | 0 | <3.74 | 0.00 |
| VA | 31,895 | 14,307 | 53,561 | 16,988 | 897 | 296 | 16.75 | 17.42 |
| Meta-analysis | 873,073 | 284,953 | 1,104,043 | 273,322 | 15,291 | 3,124 | 13.85 | 11.43 |

## HCQ vs. SSZ: Cardiovascular events (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CCAE | 66,533 | 22,357 | 65,225 | 14,485 | 839 | 197 | 12.86 | 13.60 |
| JMDC | 238 | 2,097 | 245 | 1,709 | 6 | 11 | 24.48 | 6.44 |
| MDCD | 8,041 | 2,186 | 5,500 | 1,180 | 388 | 78 | 70.54 | 66.08 |
| MDCR | 15,759 | 5,167 | 17,012 | 3,750 | 1,295 | 310 | 76.12 | 82.67 |
| OpenClaims | 619,493 | 183,209 | 841,052 | 167,943 | 22,657 | 4,394 | 26.94 | 26.16 |
| Optum | 51,095 | 17,340 | 50,959 | 11,973 | 2,232 | 490 | 43.80 | 40.92 |
| VA | 31,913 | 14,300 | 52,856 | 16,762 | 1,577 | 546 | 29.84 | 32.57 |
| Meta-analysis | 792,834 | 244,559 | 1,032,607 | 216,095 | 28,988 | 6,015 | 28.07 | 27.83 |

## HCQ vs. SSZ: Cardiac arrhythmia (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| AmbEMR | 56,743 | 15,208 | 18,287 | 5,583 | 467 | 163 | 25.54 | 29.19 |
| CCAE | 66,430 | 22,337 | 64,075 | 14,248 | 1,301 | 348 | 20.30 | 24.42 |
| CPRD | 9,120 | 11,390 | 17,734 | 25,883 | 113 | 180 | 6.37 | 6.95 |
| DAGermany | 3,883 | 5,040 | 2,533 | 3,512 | 22 | 38 | 8.68 | 10.82 |
| IMRD | 8,847 | 8,452 | 17,107 | 18,536 | 101 | 123 | 5.90 | 6.64 |
| JMDC | 241 | 2,094 | 255 | 1,695 | 0 | 22 | 0.00 | 12.97 |
| MDCD | 8,051 | 2,191 | 5,594 | 1,209 | 232 | 40 | 41.47 | 33.06 |
| MDCR | 15,763 | 5,165 | 17,142 | 3,786 | 726 | 183 | 42.35 | 48.33 |
| OpenClaims | 619,285 | 183,147 | 832,066 | 166,281 | 19,445 | 4,134 | 23.37 | 24.86 |
| Optum | 51,069 | 17,320 | 50,812 | 11,781 | 1,557 | 461 | 30.64 | 39.13 |
| VA | 31,766 | 14,275 | 51,824 | 16,415 | 1,391 | 508 | 26.84 | 30.95 |
| Meta-analysis | 870,957 | 284,525 | 1,077,180 | 267,238 | 25,355 | 6,178 | 23.54 | 23.12 |

## HCQ vs. SSZ: Bradycardia (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| AmbEMR | 57,594 | 15,350 | 18,770 | 5,697 | 60 | 15 | 3.20 | 2.63 |
| CCAE | 66,640 | 22,373 | 66,057 | 14,627 | 69 | 13 | 1.04 | 0.89 |
| CPRD | 9,127 | 11,398 | 18,044 | 26,518 | <5 | <5 | <0.28 | <0.19 |
| DAGermany | 3,887 | 5,047 | 2,565 | 3,562 | 0 | 0 | 0.00 | 0.00 |
| IMRD | 8,852 | 8,460 | 17,375 | 18,949 | <5 | <5 | <0.29 | <0.26 |
| JMDC | 241 | 2,099 | 255 | 1,715 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,085 | 2,197 | 5,837 | 1,244 | 30 | <5 | 5.14 | <4.02 |
| MDCR | 15,830 | 5,190 | 18,162 | 4,025 | 106 | 25 | 5.84 | 6.21 |
| OpenClaims | 620,919 | 183,510 | 865,587 | 172,131 | 2,791 | 507 | 3.22 | 2.95 |
| Optum | 51,259 | 17,386 | 52,954 | 12,406 | 256 | 55 | 4.83 | 4.43 |
| VA | 32,018 | 14,345 | 54,845 | 17,431 | 231 | 62 | 4.21 | 3.56 |
| Meta-analysis | 870,324 | 280,209 | 1,117,636 | 273,031 | <3,553 | <692 | <3.18 | <2.53 |

## HCQ vs. SSZ: Transient ischemic attack (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CCAE | 66,617 | 22,372 | 65,911 | 14,617 | 187 | 35 | 2.84 | 2.39 |
| JMDC | 241 | 2,099 | 255 | 1,713 | 0 | <5 | 0.00 | <2.92 |
| MDCD | 8,078 | 2,198 | 5,820 | 1,237 | 58 | 10 | 9.97 | 8.08 |
| MDCR | 15,821 | 5,187 | 18,062 | 4,002 | 202 | 47 | 11.18 | 11.74 |
| OpenClaims | 620,812 | 183,511 | 864,539 | 172,000 | 3,381 | 615 | 3.91 | 3.58 |
| Optum | 51,235 | 17,377 | 52,876 | 12,376 | 375 | 75 | 7.09 | 6.06 |
| VA | 32,010 | 14,346 | 55,042 | 17,462 | 153 | 49 | 2.78 | 2.81 |
| Meta-analysis | 794,573 | 244,991 | 1,062,251 | 221,697 | 4,356 | 831 | 4.10 | 3.75 |

## HCQ vs. SSZ: Stroke (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CCAE | 66,619 | 22,374 | 65,902 | 14,602 | 221 | 41 | 3.35 | 2.81 |
| JMDC | 238 | 2,098 | 247 | 1,715 | <5 | <5 | <20.17 | <2.92 |
| MDCD | 8,073 | 2,196 | 5,779 | 1,237 | 103 | 15 | 17.82 | 12.13 |
| MDCR | 15,825 | 5,186 | 18,024 | 3,993 | 300 | 66 | 16.64 | 16.53 |
| OpenClaims | 620,748 | 183,482 | 862,681 | 171,537 | 5,413 | 1,122 | 6.27 | 6.54 |
| Optum | 51,239 | 17,376 | 52,704 | 12,379 | 562 | 106 | 10.66 | 8.56 |
| VA | 32,008 | 14,341 | 54,968 | 17,437 | 241 | 70 | 4.38 | 4.01 |
| Meta-analysis | 794,512 | 244,955 | 1,060,060 | 221,187 | 6,840 | 1,420 | 6.45 | 6.42 |

## HCQ vs. SSZ: Venous thromboembolism (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| AmbEMR | 57,262 | 15,281 | 18,601 | 5,643 | 201 | 68 | 10.81 | 12.05 |
| CCAE | 66,528 | 22,358 | 65,258 | 14,507 | 650 | 152 | 9.96 | 10.48 |
| CPRD | 9,118 | 11,390 | 17,689 | 26,057 | 130 | 177 | 7.35 | 6.79 |
| DAGermany | 3,881 | 5,033 | 2,506 | 3,499 | 34 | 47 | 13.56 | 13.43 |
| IMRD | 8,841 | 8,455 | 17,078 | 18,657 | 116 | 123 | 6.79 | 6.59 |
| JMDC | 238 | 2,097 | 247 | 1,707 | <5 | 10 | <20.16 | 5.86 |
| MDCD | 8,059 | 2,196 | 5,688 | 1,227 | 157 | 19 | 27.60 | 15.47 |
| MDCR | 15,780 | 5,176 | 17,782 | 3,933 | 442 | 89 | 24.86 | 22.63 |
| OpenClaims | 620,093 | 183,330 | 852,503 | 170,043 | 10,006 | 2,001 | 11.74 | 11.77 |
| Optum | 51,153 | 17,355 | 52,069 | 12,270 | 949 | 207 | 18.23 | 16.87 |
| SIDIAP | 1,246 | 381 | 1,335 | 429 | 6 | <5 | 4.49 | <11.64 |
| VA | 31,962 | 14,328 | 54,186 | 17,205 | 583 | 208 | 10.76 | 12.09 |
| Meta-analysis | 872,677 | 284,902 | 1,103,363 | 273,046 | 13,268 | 3,091 | 12.03 | 11.32 |

## HCQ vs. SSZ: Gastrointestinal bleeding (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CCAE | 66,621 | 22,357 | 65,791 | 14,620 | 332 | 54 | 5.05 | 3.69 |
| JMDC | 240 | 2,096 | 254 | 1,709 | <5 | 7 | <19.68 | 4.09 |
| MDCD | 8,071 | 2,191 | 5,766 | 1,237 | 109 | 13 | 18.90 | 10.51 |
| MDCR | 15,813 | 5,177 | 17,960 | 4,003 | 350 | 62 | 19.49 | 15.49 |
| OpenClaims | 620,631 | 183,371 | 861,589 | 171,477 | 6,086 | 1,108 | 7.06 | 6.46 |
| Optum | 51,218 | 17,345 | 52,595 | 12,387 | 658 | 118 | 12.51 | 9.53 |
| VA | 31,993 | 14,334 | 54,761 | 17,380 | 390 | 143 | 7.12 | 8.23 |
| Meta-analysis | 794,347 | 244,775 | 1,058,466 | 221,107 | 7,925 | 1,498 | 7.49 | 6.77 |

## HCQ vs. SSZ: Acute renal failure (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CCAE | 66,584 | 22,362 | 65,639 | 14,575 | 526 | 96 | 8.01 | 6.59 |
| JMDC | 241 | 2,099 | 255 | 1,712 | 0 | <5 | 0.00 | <2.92 |
| MDCD | 8,051 | 2,189 | 5,659 | 1,206 | 256 | 44 | 45.23 | 36.48 |
| MDCR | 15,797 | 5,181 | 17,766 | 3,947 | 608 | 133 | 34.22 | 33.69 |
| OpenClaims | 620,101 | 183,354 | 853,586 | 170,551 | 13,812 | 2,404 | 16.18 | 14.10 |
| Optum | 51,166 | 17,353 | 52,015 | 12,252 | 1,377 | 298 | 26.47 | 24.32 |
| VA | 31,947 | 14,317 | 53,643 | 17,202 | 1,214 | 307 | 22.63 | 17.85 |
| Meta-analysis | 793,646 | 244,756 | 1,048,310 | 219,735 | 17,793 | 3,282 | 16.97 | 14.94 |

## HCQ vs. SSZ: End stage renal disease (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| AmbEMR | 57,647 | 15,355 | 18,828 | 5,705 | 12 | <5 | 0.64 | <0.88 |
| CCAE | 66,641 | 22,378 | 66,103 | 14,639 | 48 | 8 | 0.73 | 0.55 |
| CPRD | 9,127 | 11,398 | 18,044 | 26,519 | <5 | 0 | <0.28 | 0.00 |
| DAGermany | 3,887 | 5,047 | 2,565 | 3,562 | <5 | 0 | <1.95 | 0.00 |
| IMRD | 8,852 | 8,460 | 17,375 | 18,950 | <5 | 0 | <0.29 | 0.00 |
| JMDC | 241 | 2,099 | 255 | 1,715 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,087 | 2,198 | 5,863 | 1,246 | 15 | <5 | 2.56 | <4.01 |
| MDCR | 15,838 | 5,191 | 18,265 | 4,048 | 56 | 7 | 3.07 | 1.73 |
| OpenClaims | 621,009 | 183,543 | 868,587 | 172,709 | 1,298 | 174 | 1.49 | 1.01 |
| Optum | 51,271 | 17,389 | 53,231 | 12,467 | 118 | 19 | 2.22 | 1.52 |
| SIDIAP | 1,247 | 381 | 1,344 | 430 | 0 | 0 | 0.00 | 0.00 |
| VA | 32,020 | 14,348 | 55,202 | 17,510 | 86 | 27 | 1.56 | 1.54 |
| Meta-analysis | 852,513 | 260,402 | 1,086,082 | 228,327 | 1,633 | <245 | 1.50 | <1.07 |

## HCQ vs. SSZ: Hepatic failure (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| AmbEMR | 57,658 | 15,358 | 18,834 | 5,706 | <5 | 0 | <0.27 | 0.00 |
| CCAE | 66,638 | 22,378 | 66,101 | 14,641 | 50 | 11 | 0.76 | 0.75 |
| CPRD | 9,127 | 11,398 | 18,045 | 26,519 | 0 | 0 | 0.00 | 0.00 |
| DAGermany | 3,887 | 5,047 | 2,565 | 3,562 | <5 | <5 | <1.95 | <1.40 |
| IMRD | 8,852 | 8,460 | 17,375 | 18,950 | 0 | 0 | 0.00 | 0.00 |
| JMDC | 241 | 2,099 | 255 | 1,713 | 0 | <5 | 0.00 | <2.92 |
| MDCD | 8,085 | 2,198 | 5,863 | 1,245 | 25 | 6 | 4.26 | 4.82 |
| MDCR | 15,841 | 5,189 | 18,286 | 4,054 | 32 | 5 | 1.75 | 1.23 |
| OpenClaims | 621,042 | 183,551 | 869,402 | 172,764 | 729 | 151 | 0.84 | 0.87 |
| Optum | 51,267 | 17,387 | 53,257 | 12,457 | 102 | 26 | 1.92 | 2.09 |
| SIDIAP | 1,247 | 381 | 1,344 | 430 | 0 | 0 | 0.00 | 0.00 |
| VA | 32,025 | 14,348 | 55,258 | 17,525 | 61 | 14 | 1.10 | 0.80 |
| Meta-analysis | 798,785 | 250,098 | 1,070,735 | 226,251 | <1,004 | <218 | <0.94 | <0.96 |

## HCQ vs. SSZ: Acute pancreatitis (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ | HCQ | SSZ |
| CCAE | 66,637 | 22,374 | 65,971 | 14,628 | 143 | 34 | 2.17 | 2.32 |
| JMDC | 241 | 2,099 | 253 | 1,714 | <5 | <5 | <19.73 | <2.92 |
| MDCD | 8,077 | 2,196 | 5,805 | 1,241 | 55 | 8 | 9.47 | 6.45 |
| MDCR | 15,833 | 5,188 | 18,227 | 4,052 | 62 | 15 | 3.40 | 3.70 |
| OpenClaims | 620,956 | 183,525 | 867,202 | 172,482 | 1,881 | 390 | 2.17 | 2.26 |
| Optum | 51,259 | 17,384 | 53,159 | 12,444 | 171 | 50 | 3.22 | 4.02 |
| VA | 32,023 | 14,347 | 55,144 | 17,487 | 106 | 46 | 1.92 | 2.63 |
| Meta-analysis | 794,785 | 245,014 | 1,065,510 | 222,337 | 2,418 | 543 | 2.27 | 2.44 |

## HCQ+AZM vs. HCQ+AMX: All-cause mortality (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CPRD | 9,127 | 11,398 | 747 | 934 | 6 | 5 | 8.03 | 5.35 |
| IMRD | 8,851 | 8,460 | 723 | 692 | <5 | 6 | <6.91 | 8.66 |
| Optum | 51,280 | 17,389 | 4,161 | 1,411 | 20 | 10 | 4.81 | 7.09 |
| SIDIAP | 1,247 | 381 | 102 | 31 | 0 | 0 | 0.00 | 0.00 |
| VA | 32,028 | 14,349 | 2,627 | 1,176 | 45 | 17 | 17.13 | 14.45 |
| Meta-analysis | 101,286 | 51,596 | 8,259 | 4,215 | <76 | 38 | <9.20 | 9.02 |

## HCQ+AZM vs. HCQ+AMX: Cardiovascular-related mortality (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CPRD | 9,127 | 11,398 | 747 | 934 | 0 | 0 | 0.00 | 0.00 |
| IMRD | 8,852 | 8,460 | 723 | 692 | 0 | 0 | 0.00 | 0.00 |
| Optum | 51,280 | 17,389 | 4,161 | 1,411 | 16 | <5 | 3.85 | <3.54 |
| SIDIAP | 1,247 | 381 | 102 | 31 | 0 | 0 | 0.00 | 0.00 |
| VA | 32,028 | 14,349 | 2,627 | 1,176 | 9 | <5 | 3.43 | <4.25 |
| Meta-analysis | 83,308 | 31,738 | 6,788 | 2,588 | 25 | <10 | 3.68 | <3.86 |

## HCQ+AZM vs. HCQ+AMX: Myocardial infarction (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CCAE | 66,630 | 22,374 | 5,412 | 1,817 | 29 | 11 | 5.36 | 6.05 |
| JMDC | 241 | 2,099 | 19 | 171 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,079 | 2,196 | 658 | 178 | 13 | 5 | 19.75 | 27.98 |
| MDCR | 15,827 | 5,190 | 1,289 | 422 | 26 | 10 | 20.17 | 23.68 |
| OpenClaims | 620,751 | 183,482 | 50,960 | 15,063 | 369 | 89 | 7.24 | 5.91 |
| Optum | 51,244 | 17,380 | 4,156 | 1,409 | 51 | 20 | 12.27 | 14.19 |
| PanTher | 78,424 | 21,885 | 6,353 | 1,772 | 59 | 12 | 9.29 | 6.77 |
| VA | 32,009 | 14,342 | 2,624 | 1,175 | 30 | 9 | 11.43 | 7.65 |
| Meta-analysis | 872,964 | 266,849 | 71,454 | 21,840 | 577 | 156 | 8.08 | 7.14 |

## HCQ+AZM vs. HCQ+AMX: Chest pain or angina (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| AmbEMR | 57,140 | 15,268 | 4,684 | 1,251 | 122 | 31 | 26.04 | 24.76 |
| CCAE | 65,935 | 22,173 | 5,338 | 1,795 | 440 | 143 | 82.41 | 79.62 |
| CPRD | 9,114 | 11,388 | 746 | 933 | 10 | 17 | 13.40 | 18.22 |
| DAGermany | 3,884 | 5,045 | 318 | 414 | <5 | 5 | <15.69 | 12.07 |
| IMRD | 8,843 | 8,452 | 722 | 691 | 9 | 10 | 12.45 | 14.46 |
| JMDC | 238 | 2,092 | 19 | 170 | <5 | 5 | <258.53 | 29.33 |
| MDCD | 7,982 | 2,177 | 647 | 176 | 80 | 23 | 123.50 | 130.43 |
| MDCR | 15,690 | 5,150 | 1,274 | 417 | 129 | 49 | 101.25 | 117.43 |
| OpenClaims | 617,628 | 182,776 | 50,613 | 14,977 | 2,674 | 804 | 52.83 | 53.68 |
| Optum | 50,698 | 17,221 | 4,098 | 1,390 | 396 | 166 | 96.62 | 119.34 |
| PanTher | 76,844 | 21,549 | 6,199 | 1,738 | 629 | 143 | 101.46 | 82.23 |
| SIDIAP | 1,245 | 381 | 101 | 31 | <5 | <5 | <49.03 | <160.18 |
| VA | 31,824 | 14,276 | 2,605 | 1,168 | 130 | 54 | 49.89 | 46.20 |
| Meta-analysis | 945,582 | 305,475 | 77,249 | 24,956 | <4,624 | 1,445 | <59.86 | 57.90 |

## HCQ+AZM vs. HCQ+AMX: Heart failure (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| AmbEMR | 57,383 | 15,305 | 4,707 | 1,255 | 42 | 10 | 8.92 | 7.96 |
| CCAE | 66,604 | 22,370 | 5,410 | 1,817 | 30 | 5 | 5.55 | 2.75 |
| CPRD | 9,126 | 11,397 | 747 | 934 | <5 | <5 | <6.69 | <5.35 |
| DAGermany | 3,885 | 5,042 | 318 | 413 | <5 | <5 | <15.68 | <12.08 |
| IMRD | 8,852 | 8,460 | 723 | 692 | <5 | <5 | <6.91 | <7.22 |
| JMDC | 239 | 2,093 | 19 | 170 | <5 | <5 | <257.18 | <29.30 |
| MDCD | 8,072 | 2,195 | 657 | 178 | 15 | <5 | 22.81 | <27.99 |
| MDCR | 15,808 | 5,171 | 1,287 | 420 | 39 | 19 | 30.30 | 45.22 |
| OpenClaims | 620,244 | 183,350 | 50,903 | 15,048 | 749 | 214 | 14.71 | 14.22 |
| Optum | 51,204 | 17,356 | 4,151 | 1,407 | 84 | 25 | 20.23 | 17.76 |
| PanTher | 77,813 | 21,768 | 6,295 | 1,761 | 237 | 50 | 37.64 | 28.39 |
| SIDIAP | 1,246 | 381 | 102 | 31 | <5 | 0 | <48.91 | 0.00 |
| VA | 31,895 | 14,307 | 2,614 | 1,172 | 56 | 17 | 21.42 | 14.49 |
| Meta-analysis | 950,886 | 306,721 | 77,817 | 25,102 | <1,267 | <360 | <16.28 | <14.34 |

## HCQ+AZM vs. HCQ+AMX: Cardiovascular events (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CCAE | 66,533 | 22,357 | 5,401 | 1,815 | 97 | 36 | 17.96 | 19.83 |
| JMDC | 238 | 2,097 | 19 | 171 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,041 | 2,186 | 654 | 177 | 35 | 11 | 53.50 | 61.95 |
| MDCR | 15,759 | 5,167 | 1,280 | 419 | 117 | 39 | 91.39 | 93.05 |
| OpenClaims | 619,493 | 183,209 | 50,809 | 15,027 | 1,636 | 470 | 32.20 | 31.28 |
| Optum | 51,095 | 17,340 | 4,138 | 1,404 | 215 | 76 | 51.96 | 54.11 |
| PanTher | 77,825 | 21,752 | 6,295 | 1,759 | 294 | 70 | 46.70 | 39.79 |
| VA | 31,913 | 14,300 | 2,613 | 1,171 | 120 | 46 | 45.92 | 39.28 |
| Meta-analysis | 870,659 | 266,311 | 71,192 | 21,774 | 2,514 | 748 | 35.31 | 34.35 |

## HCQ+AZM vs. HCQ+AMX: Cardiac arrhythmia (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| AmbEMR | 56,743 | 15,208 | 4,650 | 1,246 | 147 | 43 | 31.61 | 34.50 |
| CCAE | 66,430 | 22,337 | 5,391 | 1,812 | 153 | 58 | 28.38 | 32.00 |
| CPRD | 9,120 | 11,390 | 746 | 933 | 7 | 14 | 9.38 | 15.00 |
| DAGermany | 3,883 | 5,040 | 318 | 413 | <5 | 5 | <15.70 | 12.09 |
| IMRD | 8,847 | 8,452 | 723 | 691 | 8 | 12 | 11.06 | 17.35 |
| JMDC | 241 | 2,094 | 19 | 170 | 0 | <5 | 0.00 | <29.30 |
| MDCD | 8,051 | 2,191 | 655 | 178 | 37 | 10 | 56.48 | 56.15 |
| MDCR | 15,763 | 5,165 | 1,282 | 419 | 73 | 24 | 56.93 | 57.20 |
| OpenClaims | 619,285 | 183,147 | 50,795 | 15,020 | 1,505 | 490 | 29.63 | 32.62 |
| Optum | 51,069 | 17,320 | 4,137 | 1,403 | 159 | 61 | 38.43 | 43.46 |
| PanTher | 77,008 | 21,581 | 6,219 | 1,743 | 472 | 115 | 75.89 | 65.97 |
| VA | 31,766 | 14,275 | 2,601 | 1,169 | 107 | 45 | 41.12 | 38.48 |
| Meta-analysis | 947,965 | 306,106 | 77,520 | 25,032 | <2,673 | 877 | <34.48 | 35.03 |

## HCQ+AZM vs. HCQ+AMX: Bradycardia (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| AmbEMR | 57,594 | 15,350 | 4,725 | 1,259 | 17 | <5 | 3.60 | <3.97 |
| CCAE | 66,640 | 22,373 | 5,414 | 1,817 | 5 | <5 | 0.92 | <2.75 |
| CPRD | 9,127 | 11,398 | 747 | 934 | 0 | 0 | 0.00 | 0.00 |
| DAGermany | 3,887 | 5,047 | 319 | 414 | 0 | 0 | 0.00 | 0.00 |
| IMRD | 8,852 | 8,460 | 723 | 692 | 0 | 0 | 0.00 | 0.00 |
| JMDC | 241 | 2,099 | 19 | 171 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,085 | 2,197 | 659 | 178 | 6 | <5 | 9.10 | <27.96 |
| MDCR | 15,830 | 5,190 | 1,290 | 422 | 8 | 0 | 6.20 | 0.00 |
| OpenClaims | 620,919 | 183,510 | 50,982 | 15,067 | 155 | 56 | 3.04 | 3.72 |
| Optum | 51,259 | 17,386 | 4,158 | 1,410 | 23 | <5 | 5.53 | <3.54 |
| PanTher | 78,425 | 21,911 | 6,352 | 1,774 | 62 | 16 | 9.76 | 9.02 |
| VA | 32,018 | 14,345 | 2,626 | 1,176 | 9 | <5 | 3.43 | <4.25 |
| Meta-analysis | 914,940 | 277,072 | 74,919 | 22,684 | 277 | <97 | 3.70 | <4.28 |

## HCQ+AZM vs. HCQ+AMX: Transient ischemic attack (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CCAE | 66,617 | 22,372 | 5,411 | 1,817 | 23 | 6 | 4.25 | 3.30 |
| JMDC | 241 | 2,099 | 19 | 171 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,078 | 2,198 | 658 | 178 | 7 | <5 | 10.63 | <27.96 |
| MDCR | 15,821 | 5,187 | 1,289 | 422 | 17 | 7 | 13.19 | 16.59 |
| OpenClaims | 620,812 | 183,511 | 50,969 | 15,067 | 261 | 56 | 5.12 | 3.72 |
| Optum | 51,235 | 17,377 | 4,156 | 1,409 | 38 | 9 | 9.14 | 6.38 |
| PanTher | 78,520 | 21,921 | 6,362 | 1,775 | 26 | 7 | 4.09 | 3.94 |
| VA | 32,010 | 14,346 | 2,625 | 1,176 | 10 | 5 | 3.81 | 4.25 |
| Meta-analysis | 873,093 | 266,912 | 71,472 | 21,847 | 382 | <95 | 5.34 | <4.35 |

## HCQ+AZM vs. HCQ+AMX: Stroke (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CCAE | 66,619 | 22,374 | 5,411 | 1,817 | 26 | 8 | 4.80 | 4.40 |
| JMDC | 238 | 2,098 | 19 | 171 | 0 | <5 | 0.00 | <29.22 |
| MDCD | 8,073 | 2,196 | 657 | 178 | 13 | <5 | 19.76 | <27.98 |
| MDCR | 15,825 | 5,186 | 1,289 | 421 | 29 | 9 | 22.50 | 21.34 |
| OpenClaims | 620,748 | 183,482 | 50,960 | 15,063 | 383 | 98 | 7.52 | 6.51 |
| Optum | 51,239 | 17,376 | 4,156 | 1,409 | 41 | 12 | 9.86 | 8.51 |
| PanTher | 78,442 | 21,897 | 6,354 | 1,773 | 52 | 10 | 8.18 | 5.64 |
| VA | 32,008 | 14,341 | 2,625 | 1,175 | 19 | 8 | 7.24 | 6.80 |
| Meta-analysis | 872,954 | 266,852 | 71,455 | 21,840 | 563 | <150 | 7.88 | <6.87 |

## HCQ+AZM vs. HCQ+AMX: Venous thromboembolism (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| AmbEMR | 57,262 | 15,281 | 4,697 | 1,253 | 52 | 17 | 11.07 | 13.56 |
| CCAE | 66,528 | 22,358 | 5,402 | 1,815 | 70 | 23 | 12.96 | 12.67 |
| CPRD | 9,118 | 11,390 | 746 | 933 | <5 | 11 | <6.70 | 11.79 |
| DAGermany | 3,881 | 5,033 | 318 | 413 | <5 | 6 | <15.70 | 14.53 |
| IMRD | 8,841 | 8,455 | 722 | 692 | 5 | 10 | 6.92 | 14.45 |
| JMDC | 238 | 2,097 | 19 | 170 | 0 | <5 | 0.00 | <29.25 |
| MDCD | 8,059 | 2,196 | 656 | 178 | 24 | <5 | 36.57 | <27.98 |
| MDCR | 15,780 | 5,176 | 1,285 | 421 | 41 | 8 | 31.90 | 18.99 |
| OpenClaims | 620,093 | 183,330 | 50,889 | 15,045 | 788 | 237 | 15.48 | 15.75 |
| Optum | 51,153 | 17,355 | 4,146 | 1,407 | 104 | 31 | 25.08 | 22.03 |
| PanTher | 78,092 | 21,804 | 6,317 | 1,764 | 241 | 52 | 38.15 | 29.47 |
| SIDIAP | 1,246 | 381 | 102 | 31 | 0 | 0 | 0.00 | 0.00 |
| VA | 31,962 | 14,328 | 2,620 | 1,174 | 42 | 22 | 16.03 | 18.73 |
| Meta-analysis | 950,769 | 306,706 | 77,802 | 25,099 | <1,377 | <422 | <17.70 | <16.81 |

## HCQ+AZM vs. HCQ+AMX: Gastrointestinal bleeding (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CCAE | 66,621 | 22,357 | 5,410 | 1,816 | 40 | 12 | 7.39 | 6.61 |
| JMDC | 240 | 2,096 | 19 | 170 | <5 | <5 | <256.39 | <29.28 |
| MDCD | 8,071 | 2,191 | 657 | 178 | 16 | <5 | 24.33 | <28.05 |
| MDCR | 15,813 | 5,177 | 1,288 | 421 | 31 | 7 | 24.06 | 16.62 |
| OpenClaims | 620,631 | 183,371 | 50,948 | 15,052 | 438 | 126 | 8.60 | 8.37 |
| Optum | 51,218 | 17,345 | 4,153 | 1,407 | 68 | 13 | 16.37 | 9.24 |
| PanTher | 78,411 | 21,890 | 6,351 | 1,772 | 78 | 18 | 12.28 | 10.15 |
| VA | 31,993 | 14,334 | 2,623 | 1,174 | 26 | 16 | 9.91 | 13.62 |
| Meta-analysis | 872,758 | 266,665 | 71,434 | 21,823 | 697 | <197 | 9.76 | <9.03 |

## HCQ+AZM vs. HCQ+AMX: Acute renal failure (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CCAE | 66,584 | 22,362 | 5,407 | 1,816 | 72 | 27 | 13.32 | 14.87 |
| JMDC | 241 | 2,099 | 19 | 171 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,051 | 2,189 | 654 | 177 | 41 | 13 | 62.61 | 73.10 |
| MDCR | 15,797 | 5,181 | 1,285 | 421 | 60 | 17 | 46.67 | 40.37 |
| OpenClaims | 620,101 | 183,354 | 50,881 | 15,045 | 1,061 | 308 | 20.85 | 20.47 |
| Optum | 51,166 | 17,353 | 4,145 | 1,406 | 163 | 54 | 39.32 | 38.39 |
| PanTher | 78,010 | 21,797 | 6,315 | 1,764 | 186 | 42 | 29.45 | 23.81 |
| VA | 31,947 | 14,317 | 2,616 | 1,172 | 102 | 35 | 38.98 | 29.84 |
| Meta-analysis | 871,656 | 266,553 | 71,307 | 21,803 | 1,685 | 496 | 23.63 | 22.75 |

## HCQ+AZM vs. HCQ+AMX: End stage renal disease (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| AmbEMR | 57,647 | 15,355 | 4,731 | 1,260 | 0 | 0 | 0.00 | 0.00 |
| CCAE | 66,641 | 22,378 | 5,414 | 1,817 | <5 | <5 | <0.92 | <2.75 |
| CPRD | 9,127 | 11,398 | 747 | 934 | 0 | 0 | 0.00 | 0.00 |
| DAGermany | 3,887 | 5,047 | 319 | 414 | 0 | 0 | 0.00 | 0.00 |
| IMRD | 8,852 | 8,460 | 723 | 692 | 0 | 0 | 0.00 | 0.00 |
| JMDC | 241 | 2,099 | 19 | 171 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,087 | 2,198 | 659 | 178 | 0 | 0 | 0.00 | 0.00 |
| MDCR | 15,838 | 5,191 | 1,291 | 422 | <5 | <5 | <3.87 | <11.83 |
| OpenClaims | 621,009 | 183,543 | 50,993 | 15,071 | 70 | 8 | 1.37 | 0.53 |
| Optum | 51,271 | 17,389 | 4,160 | 1,411 | 7 | <5 | 1.68 | <3.54 |
| PanTher | 78,526 | 21,924 | 6,362 | 1,776 | 27 | <5 | 4.24 | <2.82 |
| SIDIAP | 1,247 | 381 | 102 | 31 | 0 | 0 | 0.00 | 0.00 |
| VA | 32,020 | 14,348 | 2,626 | 1,176 | 5 | <5 | 1.90 | <4.25 |
| Meta-analysis | 865,305 | 264,773 | 70,848 | 21,676 | <119 | <33 | <1.68 | <1.52 |

## HCQ+AZM vs. HCQ+AMX: Hepatic failure (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| AmbEMR | 57,658 | 15,358 | 4,732 | 1,260 | 0 | 0 | 0.00 | 0.00 |
| CCAE | 66,638 | 22,378 | 5,413 | 1,818 | 6 | <5 | 1.11 | <2.75 |
| CPRD | 9,127 | 11,398 | 747 | 934 | 0 | 0 | 0.00 | 0.00 |
| DAGermany | 3,887 | 5,047 | 319 | 414 | 0 | 0 | 0.00 | 0.00 |
| IMRD | 8,852 | 8,460 | 723 | 692 | 0 | 0 | 0.00 | 0.00 |
| JMDC | 241 | 2,099 | 19 | 171 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,085 | 2,198 | 659 | 178 | <5 | <5 | <7.58 | <27.95 |
| MDCR | 15,841 | 5,189 | 1,291 | 422 | 0 | 0 | 0.00 | 0.00 |
| OpenClaims | 621,042 | 183,551 | 50,997 | 15,071 | 42 | 23 | 0.82 | 1.53 |
| Optum | 51,267 | 17,387 | 4,159 | 1,410 | 13 | <5 | 3.13 | <3.54 |
| PanTher | 78,529 | 21,916 | 6,363 | 1,775 | 32 | 9 | 5.03 | 5.07 |
| SIDIAP | 1,247 | 381 | 102 | 31 | 0 | 0 | 0.00 | 0.00 |
| VA | 32,025 | 14,348 | 2,627 | 1,176 | 5 | <5 | 1.90 | <4.25 |
| Meta-analysis | 857,586 | 261,778 | 70,220 | 21,431 | <103 | <52 | <1.47 | <2.43 |

## HCQ+AZM vs. HCQ+AMX: Acute pancreatitis (30-day fixed)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CCAE | 66,637 | 22,374 | 5,413 | 1,817 | 22 | 7 | 4.06 | 3.85 |
| JMDC | 241 | 2,099 | 19 | 171 | 0 | <5 | 0.00 | <29.22 |
| MDCD | 8,077 | 2,196 | 658 | 178 | 10 | <5 | 15.19 | <27.97 |
| MDCR | 15,833 | 5,188 | 1,290 | 422 | 6 | <5 | 4.65 | <11.84 |
| OpenClaims | 620,956 | 183,525 | 50,985 | 15,068 | 155 | 50 | 3.04 | 3.32 |
| Optum | 51,259 | 17,384 | 4,158 | 1,410 | 21 | 9 | 5.05 | 6.38 |
| PanTher | 78,522 | 21,921 | 6,363 | 1,775 | 21 | 5 | 3.30 | 2.82 |
| VA | 32,023 | 14,347 | 2,626 | 1,176 | 12 | <5 | 4.57 | <4.25 |
| Meta-analysis | 873,307 | 266,935 | 71,496 | 21,850 | 247 | <86 | 3.45 | <3.94 |

## HCQ+AZM vs. HCQ+AMX: All-cause mortality (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CPRD | 9,127 | 11,398 | 18,045 | 26,519 | 253 | 386 | 14.02 | 14.56 |
| IMRD | 8,851 | 8,460 | 17,370 | 18,944 | 214 | 241 | 12.32 | 12.72 |
| Optum | 51,280 | 17,389 | 53,327 | 12,476 | 527 | 66 | 9.88 | 5.29 |
| SIDIAP | 1,247 | 381 | 1,344 | 430 | 8 | <5 | 5.95 | <11.63 |
| VA | 32,028 | 14,349 | 55,314 | 17,537 | 1,356 | 327 | 24.51 | 18.65 |
| Meta-analysis | 101,286 | 51,596 | 144,058 | 75,478 | 2,350 | 1,020 | 16.31 | 13.51 |

## HCQ+AZM vs. HCQ+AMX: Cardiovascular-related mortality (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CPRD | 9,127 | 11,398 | 18,045 | 26,519 | 7 | 25 | 0.39 | 0.94 |
| IMRD | 8,852 | 8,460 | 17,375 | 18,950 | 0 | 0 | 0.00 | 0.00 |
| Optum | 51,280 | 17,389 | 53,331 | 12,476 | 234 | 25 | 4.39 | 2.00 |
| SIDIAP | 1,247 | 381 | 1,344 | 430 | 0 | 0 | 0.00 | 0.00 |
| VA | 32,028 | 14,349 | 55,314 | 17,537 | 315 | 65 | 5.69 | 3.71 |
| Meta-analysis | 92,435 | 43,136 | 126,690 | 56,533 | 556 | 115 | 4.39 | 2.03 |

## HCQ+AZM vs. HCQ+AMX: Myocardial infarction (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CCAE | 66,630 | 22,374 | 65,865 | 14,613 | 240 | 48 | 3.64 | 3.28 |
| JMDC | 241 | 2,099 | 255 | 1,715 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,079 | 2,196 | 5,796 | 1,229 | 83 | 14 | 14.32 | 11.39 |
| MDCR | 15,827 | 5,190 | 18,021 | 3,989 | 287 | 70 | 15.93 | 17.55 |
| OpenClaims | 620,751 | 183,482 | 863,192 | 171,694 | 5,396 | 956 | 6.25 | 5.57 |
| Optum | 51,244 | 17,380 | 52,823 | 12,331 | 517 | 121 | 9.79 | 9.81 |
| VA | 32,009 | 14,342 | 54,743 | 17,353 | 395 | 137 | 7.22 | 7.89 |
| Meta-analysis | 794,540 | 244,964 | 1,060,442 | 221,212 | 6,918 | 1,346 | 6.52 | 6.08 |

## HCQ+AZM vs. HCQ+AMX: Chest pain or angina (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| AmbEMR | 57,140 | 15,268 | 18,452 | 5,631 | 451 | 112 | 24.44 | 19.89 |
| CCAE | 65,935 | 22,173 | 60,983 | 13,775 | 3,354 | 810 | 55.00 | 58.80 |
| CPRD | 9,114 | 11,388 | 17,340 | 25,145 | 260 | 422 | 14.99 | 16.78 |
| DAGermany | 3,884 | 5,045 | 2,508 | 3,507 | 31 | 36 | 12.36 | 10.26 |
| IMRD | 8,843 | 8,452 | 16,780 | 18,027 | 235 | 293 | 14.00 | 16.25 |
| JMDC | 238 | 2,092 | 247 | 1,686 | 5 | 31 | 20.23 | 18.38 |
| MDCD | 7,982 | 2,177 | 5,346 | 1,165 | 467 | 100 | 87.34 | 85.81 |
| MDCR | 15,690 | 5,150 | 16,502 | 3,714 | 1,178 | 279 | 71.38 | 75.12 |
| OpenClaims | 617,628 | 182,776 | 807,394 | 162,642 | 31,161 | 6,198 | 38.59 | 38.11 |
| Optum | 50,698 | 17,221 | 48,159 | 11,437 | 3,185 | 829 | 66.13 | 72.48 |
| SIDIAP | 1,245 | 381 | 1,315 | 425 | 28 | <5 | 21.29 | <11.75 |
| VA | 31,824 | 14,276 | 50,773 | 16,375 | 1,822 | 611 | 35.88 | 37.31 |
| Meta-analysis | 868,738 | 283,926 | 1,044,240 | 261,422 | 42,144 | 9,690 | 40.36 | 37.07 |

## HCQ+AZM vs. HCQ+AMX: Heart failure (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| AmbEMR | 57,383 | 15,305 | 18,647 | 5,656 | 182 | 53 | 9.76 | 9.37 |
| CCAE | 66,604 | 22,370 | 65,772 | 14,581 | 305 | 74 | 4.64 | 5.07 |
| CPRD | 9,126 | 11,397 | 18,014 | 26,442 | 16 | 36 | 0.89 | 1.36 |
| DAGermany | 3,885 | 5,042 | 2,561 | 3,535 | 11 | 22 | 4.29 | 6.22 |
| IMRD | 8,852 | 8,460 | 17,344 | 18,905 | 15 | 21 | 0.86 | 1.11 |
| JMDC | 239 | 2,093 | 246 | 1,693 | <5 | 18 | <20.27 | 10.63 |
| MDCD | 8,072 | 2,195 | 5,742 | 1,216 | 118 | 28 | 20.55 | 23.02 |
| MDCR | 15,808 | 5,171 | 17,689 | 3,885 | 586 | 141 | 33.13 | 36.29 |
| OpenClaims | 620,244 | 183,350 | 852,570 | 169,864 | 12,246 | 2,246 | 14.36 | 13.22 |
| Optum | 51,204 | 17,356 | 52,137 | 12,248 | 915 | 207 | 17.55 | 16.90 |
| SIDIAP | 1,246 | 381 | 1,336 | 430 | <5 | 0 | <3.74 | 0.00 |
| VA | 31,895 | 14,307 | 53,561 | 16,988 | 897 | 296 | 16.75 | 17.42 |
| Meta-analysis | 873,073 | 284,953 | 1,104,043 | 273,322 | 15,291 | 3,124 | 13.85 | 11.43 |

## HCQ+AZM vs. HCQ+AMX: Cardiovascular events (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CCAE | 66,533 | 22,357 | 65,225 | 14,485 | 839 | 197 | 12.86 | 13.60 |
| JMDC | 238 | 2,097 | 245 | 1,709 | 6 | 11 | 24.48 | 6.44 |
| MDCD | 8,041 | 2,186 | 5,500 | 1,180 | 388 | 78 | 70.54 | 66.08 |
| MDCR | 15,759 | 5,167 | 17,012 | 3,750 | 1,295 | 310 | 76.12 | 82.67 |
| OpenClaims | 619,493 | 183,209 | 841,052 | 167,943 | 22,657 | 4,394 | 26.94 | 26.16 |
| Optum | 51,095 | 17,340 | 50,959 | 11,973 | 2,232 | 490 | 43.80 | 40.92 |
| VA | 31,913 | 14,300 | 52,856 | 16,762 | 1,577 | 546 | 29.84 | 32.57 |
| Meta-analysis | 792,834 | 244,559 | 1,032,607 | 216,095 | 28,988 | 6,015 | 28.07 | 27.83 |

## HCQ+AZM vs. HCQ+AMX: Cardiac arrhythmia (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| AmbEMR | 56,743 | 15,208 | 18,287 | 5,583 | 467 | 163 | 25.54 | 29.19 |
| CCAE | 66,430 | 22,337 | 64,075 | 14,248 | 1,301 | 348 | 20.30 | 24.42 |
| CPRD | 9,120 | 11,390 | 17,734 | 25,883 | 113 | 180 | 6.37 | 6.95 |
| DAGermany | 3,883 | 5,040 | 2,533 | 3,512 | 22 | 38 | 8.68 | 10.82 |
| IMRD | 8,847 | 8,452 | 17,107 | 18,536 | 101 | 123 | 5.90 | 6.64 |
| JMDC | 241 | 2,094 | 255 | 1,695 | 0 | 22 | 0.00 | 12.97 |
| MDCD | 8,051 | 2,191 | 5,594 | 1,209 | 232 | 40 | 41.47 | 33.06 |
| MDCR | 15,763 | 5,165 | 17,142 | 3,786 | 726 | 183 | 42.35 | 48.33 |
| OpenClaims | 619,285 | 183,147 | 832,066 | 166,281 | 19,445 | 4,134 | 23.37 | 24.86 |
| Optum | 51,069 | 17,320 | 50,812 | 11,781 | 1,557 | 461 | 30.64 | 39.13 |
| VA | 31,766 | 14,275 | 51,824 | 16,415 | 1,391 | 508 | 26.84 | 30.95 |
| Meta-analysis | 870,957 | 284,525 | 1,077,180 | 267,238 | 25,355 | 6,178 | 23.54 | 23.12 |

## HCQ+AZM vs. HCQ+AMX: Bradycardia (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| AmbEMR | 57,594 | 15,350 | 18,770 | 5,697 | 60 | 15 | 3.20 | 2.63 |
| CCAE | 66,640 | 22,373 | 66,057 | 14,627 | 69 | 13 | 1.04 | 0.89 |
| CPRD | 9,127 | 11,398 | 18,044 | 26,518 | <5 | <5 | <0.28 | <0.19 |
| DAGermany | 3,887 | 5,047 | 2,565 | 3,562 | 0 | 0 | 0.00 | 0.00 |
| IMRD | 8,852 | 8,460 | 17,375 | 18,949 | <5 | <5 | <0.29 | <0.26 |
| JMDC | 241 | 2,099 | 255 | 1,715 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,085 | 2,197 | 5,837 | 1,244 | 30 | <5 | 5.14 | <4.02 |
| MDCR | 15,830 | 5,190 | 18,162 | 4,025 | 106 | 25 | 5.84 | 6.21 |
| OpenClaims | 620,919 | 183,510 | 865,587 | 172,131 | 2,791 | 507 | 3.22 | 2.95 |
| Optum | 51,259 | 17,386 | 52,954 | 12,406 | 256 | 55 | 4.83 | 4.43 |
| VA | 32,018 | 14,345 | 54,845 | 17,431 | 231 | 62 | 4.21 | 3.56 |
| Meta-analysis | 870,324 | 280,209 | 1,117,636 | 273,031 | <3,553 | <692 | <3.18 | <2.53 |

## HCQ+AZM vs. HCQ+AMX: Transient ischemic attack (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CCAE | 66,617 | 22,372 | 65,911 | 14,617 | 187 | 35 | 2.84 | 2.39 |
| JMDC | 241 | 2,099 | 255 | 1,713 | 0 | <5 | 0.00 | <2.92 |
| MDCD | 8,078 | 2,198 | 5,820 | 1,237 | 58 | 10 | 9.97 | 8.08 |
| MDCR | 15,821 | 5,187 | 18,062 | 4,002 | 202 | 47 | 11.18 | 11.74 |
| OpenClaims | 620,812 | 183,511 | 864,539 | 172,000 | 3,381 | 615 | 3.91 | 3.58 |
| Optum | 51,235 | 17,377 | 52,876 | 12,376 | 375 | 75 | 7.09 | 6.06 |
| VA | 32,010 | 14,346 | 55,042 | 17,462 | 153 | 49 | 2.78 | 2.81 |
| Meta-analysis | 794,573 | 244,991 | 1,062,251 | 221,697 | 4,356 | 831 | 4.10 | 3.75 |

## HCQ+AZM vs. HCQ+AMX: Stroke (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CCAE | 66,619 | 22,374 | 65,902 | 14,602 | 221 | 41 | 3.35 | 2.81 |
| JMDC | 238 | 2,098 | 247 | 1,715 | <5 | <5 | <20.17 | <2.92 |
| MDCD | 8,073 | 2,196 | 5,779 | 1,237 | 103 | 15 | 17.82 | 12.13 |
| MDCR | 15,825 | 5,186 | 18,024 | 3,993 | 300 | 66 | 16.64 | 16.53 |
| OpenClaims | 620,748 | 183,482 | 862,681 | 171,537 | 5,413 | 1,122 | 6.27 | 6.54 |
| Optum | 51,239 | 17,376 | 52,704 | 12,379 | 562 | 106 | 10.66 | 8.56 |
| VA | 32,008 | 14,341 | 54,968 | 17,437 | 241 | 70 | 4.38 | 4.01 |
| Meta-analysis | 794,512 | 244,955 | 1,060,060 | 221,187 | 6,840 | 1,420 | 6.45 | 6.42 |

## HCQ+AZM vs. HCQ+AMX: Venous thromboembolism (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| AmbEMR | 57,262 | 15,281 | 18,601 | 5,643 | 201 | 68 | 10.81 | 12.05 |
| CCAE | 66,528 | 22,358 | 65,258 | 14,507 | 650 | 152 | 9.96 | 10.48 |
| CPRD | 9,118 | 11,390 | 17,689 | 26,057 | 130 | 177 | 7.35 | 6.79 |
| DAGermany | 3,881 | 5,033 | 2,506 | 3,499 | 34 | 47 | 13.56 | 13.43 |
| IMRD | 8,841 | 8,455 | 17,078 | 18,657 | 116 | 123 | 6.79 | 6.59 |
| JMDC | 238 | 2,097 | 247 | 1,707 | <5 | 10 | <20.16 | 5.86 |
| MDCD | 8,059 | 2,196 | 5,688 | 1,227 | 157 | 19 | 27.60 | 15.47 |
| MDCR | 15,780 | 5,176 | 17,782 | 3,933 | 442 | 89 | 24.86 | 22.63 |
| OpenClaims | 620,093 | 183,330 | 852,503 | 170,043 | 10,006 | 2,001 | 11.74 | 11.77 |
| Optum | 51,153 | 17,355 | 52,069 | 12,270 | 949 | 207 | 18.23 | 16.87 |
| SIDIAP | 1,246 | 381 | 1,335 | 429 | 6 | <5 | 4.49 | <11.64 |
| VA | 31,962 | 14,328 | 54,186 | 17,205 | 583 | 208 | 10.76 | 12.09 |
| Meta-analysis | 872,677 | 284,902 | 1,103,363 | 273,046 | 13,268 | 3,091 | 12.03 | 11.32 |

## HCQ+AZM vs. HCQ+AMX: Gastrointestinal bleeding (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CCAE | 66,621 | 22,357 | 65,791 | 14,620 | 332 | 54 | 5.05 | 3.69 |
| JMDC | 240 | 2,096 | 254 | 1,709 | <5 | 7 | <19.68 | 4.09 |
| MDCD | 8,071 | 2,191 | 5,766 | 1,237 | 109 | 13 | 18.90 | 10.51 |
| MDCR | 15,813 | 5,177 | 17,960 | 4,003 | 350 | 62 | 19.49 | 15.49 |
| OpenClaims | 620,631 | 183,371 | 861,589 | 171,477 | 6,086 | 1,108 | 7.06 | 6.46 |
| Optum | 51,218 | 17,345 | 52,595 | 12,387 | 658 | 118 | 12.51 | 9.53 |
| VA | 31,993 | 14,334 | 54,761 | 17,380 | 390 | 143 | 7.12 | 8.23 |
| Meta-analysis | 794,347 | 244,775 | 1,058,466 | 221,107 | 7,925 | 1,498 | 7.49 | 6.77 |

## HCQ+AZM vs. HCQ+AMX: Acute renal failure (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CCAE | 66,584 | 22,362 | 65,639 | 14,575 | 526 | 96 | 8.01 | 6.59 |
| JMDC | 241 | 2,099 | 255 | 1,712 | 0 | <5 | 0.00 | <2.92 |
| MDCD | 8,051 | 2,189 | 5,659 | 1,206 | 256 | 44 | 45.23 | 36.48 |
| MDCR | 15,797 | 5,181 | 17,766 | 3,947 | 608 | 133 | 34.22 | 33.69 |
| OpenClaims | 620,101 | 183,354 | 853,586 | 170,551 | 13,812 | 2,404 | 16.18 | 14.10 |
| Optum | 51,166 | 17,353 | 52,015 | 12,252 | 1,377 | 298 | 26.47 | 24.32 |
| VA | 31,947 | 14,317 | 53,643 | 17,202 | 1,214 | 307 | 22.63 | 17.85 |
| Meta-analysis | 793,646 | 244,756 | 1,048,310 | 219,735 | 17,793 | 3,282 | 16.97 | 14.94 |

## HCQ+AZM vs. HCQ+AMX: End stage renal disease (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| AmbEMR | 57,647 | 15,355 | 18,828 | 5,705 | 12 | <5 | 0.64 | <0.88 |
| CCAE | 66,641 | 22,378 | 66,103 | 14,639 | 48 | 8 | 0.73 | 0.55 |
| CPRD | 9,127 | 11,398 | 18,044 | 26,519 | <5 | 0 | <0.28 | 0.00 |
| DAGermany | 3,887 | 5,047 | 2,565 | 3,562 | <5 | 0 | <1.95 | 0.00 |
| IMRD | 8,852 | 8,460 | 17,375 | 18,950 | <5 | 0 | <0.29 | 0.00 |
| JMDC | 241 | 2,099 | 255 | 1,715 | 0 | 0 | 0.00 | 0.00 |
| MDCD | 8,087 | 2,198 | 5,863 | 1,246 | 15 | <5 | 2.56 | <4.01 |
| MDCR | 15,838 | 5,191 | 18,265 | 4,048 | 56 | 7 | 3.07 | 1.73 |
| OpenClaims | 621,009 | 183,543 | 868,587 | 172,709 | 1,298 | 174 | 1.49 | 1.01 |
| Optum | 51,271 | 17,389 | 53,231 | 12,467 | 118 | 19 | 2.22 | 1.52 |
| SIDIAP | 1,247 | 381 | 1,344 | 430 | 0 | 0 | 0.00 | 0.00 |
| VA | 32,020 | 14,348 | 55,202 | 17,510 | 86 | 27 | 1.56 | 1.54 |
| Meta-analysis | 852,513 | 260,402 | 1,086,082 | 228,327 | 1,633 | <245 | 1.50 | <1.07 |

## HCQ+AZM vs. HCQ+AMX: Hepatic failure (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| AmbEMR | 57,658 | 15,358 | 18,834 | 5,706 | <5 | 0 | <0.27 | 0.00 |
| CCAE | 66,638 | 22,378 | 66,101 | 14,641 | 50 | 11 | 0.76 | 0.75 |
| CPRD | 9,127 | 11,398 | 18,045 | 26,519 | 0 | 0 | 0.00 | 0.00 |
| DAGermany | 3,887 | 5,047 | 2,565 | 3,562 | <5 | <5 | <1.95 | <1.40 |
| IMRD | 8,852 | 8,460 | 17,375 | 18,950 | 0 | 0 | 0.00 | 0.00 |
| JMDC | 241 | 2,099 | 255 | 1,713 | 0 | <5 | 0.00 | <2.92 |
| MDCD | 8,085 | 2,198 | 5,863 | 1,245 | 25 | 6 | 4.26 | 4.82 |
| MDCR | 15,841 | 5,189 | 18,286 | 4,054 | 32 | 5 | 1.75 | 1.23 |
| OpenClaims | 621,042 | 183,551 | 869,402 | 172,764 | 729 | 151 | 0.84 | 0.87 |
| Optum | 51,267 | 17,387 | 53,257 | 12,457 | 102 | 26 | 1.92 | 2.09 |
| SIDIAP | 1,247 | 381 | 1,344 | 430 | 0 | 0 | 0.00 | 0.00 |
| VA | 32,025 | 14,348 | 55,258 | 17,525 | 61 | 14 | 1.10 | 0.80 |
| Meta-analysis | 798,785 | 250,098 | 1,070,735 | 226,251 | <1,004 | <218 | <0.94 | <0.96 |

## HCQ+AZM vs. HCQ+AMX: Acute pancreatitis (On-treatment)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Patients |  | Time-at-risk |  | Events |  | IR |  |
| Database | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX | HCQ+AZM | HCQ+AMX |
| CCAE | 66,637 | 22,374 | 65,971 | 14,628 | 143 | 34 | 2.17 | 2.32 |
| JMDC | 241 | 2,099 | 253 | 1,714 | <5 | <5 | <19.73 | <2.92 |
| MDCD | 8,077 | 2,196 | 5,805 | 1,241 | 55 | 8 | 9.47 | 6.45 |
| MDCR | 15,833 | 5,188 | 18,227 | 4,052 | 62 | 15 | 3.40 | 3.70 |
| OpenClaims | 620,956 | 183,525 | 867,202 | 172,482 | 1,881 | 390 | 2.17 | 2.26 |
| Optum | 51,259 | 17,384 | 53,159 | 12,444 | 171 | 50 | 3.22 | 4.02 |
| VA | 32,023 | 14,347 | 55,144 | 17,487 | 106 | 46 | 1.92 | 2.63 |
| Meta-analysis | 794,785 | 245,014 | 1,065,510 | 222,337 | 2,418 | 543 | 2.27 | 2.44 |