Supplemental Table 1. Patient immuno-virologic and treatment details and genotypes.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | At time of enrollment | | | |  | At time of last genotype | | | | |  |  |  |  |
| Subject | Sex | Age | Plasma viral load (copies/ml) | CD4 count (cells/mm3) | On ART? |  | Plasma viral load (copies/ml) | CD4 count (cells/mm3) | PI regimen | Previous PI exposure | Days on ART | Outcome | Visits genotyped | Sequences | Drug resistance-associated amino acid changes observed# |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| H2A001+ | M | 48 | 96 | 12 | no |  | 1108 | 8 | LPV/r | IDV | 727 | death | 7 | 25 | **V10I**, G17D, S43N, **I54M**, **V71I**, **I82F**, A92T, **L99F** |
| H2A002+ | M | 50 | 53 | 103 | yes |  | UD | 34 | IDV |  | 1043 | death | 3 | 19 | V20I, **A34S**, V62A/T, V71I, T77I/V, N83D, L99F |
| H2A003+ | F | 40 | 43 | 209 | yes |  | 335\* | 117 | LPV/r | IDV | 1475 |  | 11 | 25 | **K7R**, **V10I**, **E58G**, **A73T**, **I82F**, **I89V**, **L99F** |
| H2A004+ | F | 60 | 74 | ND | yes |  | 74 | 26 | IDV |  | 474 | death | 1 | 6 | A34K, S43T, I46V, A73T, F85L, I89T, L99F |
| H2A005+ | M | 49 | 19612 | 13 | no |  | UD | 110 | IDV |  | 428 | LTFU | 5 | 13 | G17E, S43T, **K60R** |
| H2A006+ | F | 51 | 82\* | 286 | no |  | UD | 650 | IDV |  | 922 |  | 8 | 35 | **V10I**, I36V, **V62A**, **K69R**, **T74A** |
| H2A007 | F | 48 | 13058 | 109 | yes |  | 1810 | 54 | LPV/r | IDV | 2679 | death | 9 | 23 | **K7R**, **V10E**, E16G, **V33I**, **I50V**, **I54M**, **V62A/I**, **I64V**, **V71I**, **I84V**, **F85L**, **I89V**, **L99F** |
| H2A009+ | F | 35 | UD | 562 | yes |  | UD | 457\* | IDV |  | 1277 |  | 6 | 9 | K7E, **V62I**, A92T |
| H2A010+ | M | 52 | 769 | 370 | no |  | 366 | 464 | LPV/r | IDV | 1583 |  | 11 | 37 | **V10I**, **V33I**, **I46V**, **V47A**, **K60R**, **V71I**, **T77A**, **I82F**, **F85L**, **I89M/V**, **L90M**, **L99F** |
| H2A014+ | F | 31 | 43 | 200 | no |  | UD | 215 | LPV/r | IDV | 958 |  | 8 | 32 | **K7R**, **V20A**, K60R, **A73V**, N88D |
| H2A015+ | M | 53 | 72 | 194 | yes |  | 110 | 167 | IDV |  | 1142 |  | 6 | 24 | K7G/R, **V10I**, **I32L**, I54M, V71I, **I82F**, A92T |
| H2A019+ | M | 51 | 17 | 229 | yes |  | 31 | 238 | IDV |  | 860 | LTFU | 4 | 12 | K7N, V10I, I82F, I89V |
| H2A020+ | M | 45 | 52 | 94 | yes |  | 36 | 134\* | LPV/r | IDV | 1472 | death | 9 | 44 | K7N, **V10I**, **V20A**, **V33I**, **I36M**, **S43T**, **G48R**, **I50V**, I54M, **I64V**, V71I, **T74A**, **I82F**, F85L, I89V |
| H2A021+ | F | 45 | 308 | 187 | no |  | 192 | 480 | LPV/r | IDV | 1547 |  | 8 | 26 | **V10I**, G17D, **V47A**, **K60R**, **V62A**, **I82F**, **I89V**, **L99F** |
| H2A022+ | M | 52 | UD | 474\* | yes |  | UD | 580 | IDV |  | 1092 |  | 4 | 5 | G17D |
| H2A024+ | F | 38 | 427 | 306 | yes |  | 32\* | 570 | LPV/r | IDV | 2583 |  | 8 | 26 | G17D, V20I, **A34V**, **I54M**, V62I, **I89M**, **A92T**, **L99F/S** |
| H2A025+ | M | 46 | 819 | 226 | no |  | 200 | 422 | IDV |  | 599 |  | 6 | 16 | **G17D**, K60R, **E63K**, **F85L**, **I89V** |
| H2A026+ | F | 39 | 173 | 246 | yes |  | UD | 452 | IDV |  | 1282 |  | 4 | 8 | I46M, T74A, I89V |
| H2A030+ | M | 52 | 1048 | 100 | no |  | UD | 104 | IDV |  | 864 | LTFU | 4 | 13 | (wild type) |
| H2A031+ | F | 42 | 89 | 32 | no |  | UD | 59 | IDV |  | 28 |  | 2 | 4 | G17D |
| H2A033+ | F | 33 | UD | 340 | yes |  | UD | 544 | IDV |  | 862 | LTFU | 3 | 4 | **S43N** |
| H2A034+ | F | 49 | 14 | 184 | no |  | UD\* | 192 | IDV |  | 858 |  | 6 | 11 | **V20I**, E63K, V71I, T77V, **A92T** |
| H2A037+ | F | 60 | 5 | 78 | no |  | 367 | 151 | LPV/r | IDV | 1693 |  | 6 | 18 | **V10I**, **A34T**, **I54M**/V, **V62A**/I, **V71I**, **A73G**, **I82F**, **F85L**, **I89V**, **A92T** |
| H2A052 | F | 56 | 1489 | 271 | yes |  | 1692 | 230 | LPV/r | IDV | 3038 |  | 5 | 6 | **V10I**, **V33I**, **V47A**, I54M, **V62A/I**, V71I, **A73G**, F85L, I89V, L90M, **L99F** |
| H2A057 | M | 58 | 1727 | 125 | no |  | 622 | 256 | LPV/r |  | 623 |  | 4 | 6 | **I46M/V**, **E63K**, I89V |
| H2A059 | F | 46 | 1997 | 447 | yes |  | 1410 | 621 | LPV/r | IDV | 2556 |  | 5 | 6 | K7N, V10I, G17D, **V33I**, S43T, **I46V**, **I50V**, K60R, **I64V**, V71I, I82F, **A92**G/**S** |
| H2A061 | F | 41 | UD | 76 | no |  | 826 | 177\* | LPV/r | IDV | 889 |  | 4 | 8 | **V33I**, I46T, **I54M**, **I64V**, **I82F**, **I84V**, **A92T** |
| H2A062 | F | 42 | 100 | 277 | yes |  | 100\* | 228 | LPV/r | IDV | 424 |  | 2 | 4 | I82F, **I89V** |
| H2A063 | F | 51 | UD | 251 | yes |  | UD\* | 270 | IDV |  | 370 |  | 2 | 2 | **G17D** |
| H2A064 | F | 49 | 3 | 289 | yes |  | 872 | 385 | LPV/r | IDV | 1462 |  | 3 | 3 | **V10I**, G17D, **V33I**, **S43V**, **I46M**, **V47A**, K60T, E63K, V71I, T77V, **I82F**, **I89V** |
| H2A065 | F | 58 | UD | 69 | yes |  | UD | 69 | IDV |  | 763 | death | 1 | 1 | L99F |
| H2A068 | F | 52 | 62736\* | 259 | yes |  | 62736\* | 376 | LPV/r | IDV | 2165 | LTFU | 1 | 1 | K7R, V10I, V33L, I46T, I54M, I64V, V71I, T77I, I82F, A92T |
| H2A071 | M | 46 | 30194\* | 45 | yes |  | 9660 | 24\* | LPV/r | IDV | 1694 | death | 4 | 7 | I46V, V71I, M76I, T77V |
| H2A074 | F | 44 | UD\* | 352 | yes |  | UD | 249 | IDV |  | 89 |  | 1 | 1 | G17N |
| H2A075 | F | 44 | 9220\* | 225 | yes |  | 16874 | 96 | LPV/r | IDV | 1701 |  | 4 | 14 | **K7Q**, V10I, **V33I**, **A34T**, I54M, **K60R**, **V62I**, V71I, **A73G**, I82F, **I89L**, **L90M**, **A92L**/T, **L99F** |
| H2A076 | F | 41 | UD\* | 230\* | yes |  | UD\* | 230\* | IDV |  | 236 |  | 1 | 1 | (wild type) |
| H2A077 | F | 51 | UD\* | 400\* | yes |  | UD\* | 400\* | LPV/r | IDV | 875 |  | 1 | 1 | I46V |
| H2A079 | F | 30 | 185 | 102\* | yes |  | 1969 | 159 | LPV/r | IDV | 1071 | LTFU | 1 | 1 | I89V |
| H2A080 | F | 40 | 1496\* | 19 | yes |  | 1082 | 17 | LPV/r | IDV | 1066 |  | 2 | 2 | **S43I**, **I46M**, V47A, V62I, V71I, T77V |
| H2A081 | F | 36 | 29125 | 138\* | no |  | 1221 | 49 | LPV/r | IDV | 916 |  | 2 | 2 | I54M, V71I, I82F, **F85L**, I89V |
| H2A099 | M | 54 | 2863 | 244 | no |  | 624 | 277 | LPV/r |  | 585 |  | 3 | 3 | K7Q, V47A, **I64V** |
| H2A111 | F | 30 | 8229 | 34 | yes |  | 8229 | 34 | LPV/r |  | 72 | LTFU | 1 | 1 | G17D, S43T, I46V, K60R, A92N/T |
| H2A115 | F | 45 | 31 | 33 | no |  | 2313 | 27 | LPV/r |  | 21 |  | 1 | 1 | (wild type) |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

+ Patient included in previous analysis, see (6).

\* Viral load or CD4 count not available for the visit – value shown is from closest available visit.

# Mutation observed at any study visit. Mutations in bold occurred between first and last genotype.

LTFU – lost to follow-up, UD – undetectable (<25 copies/mL), LPV/r – Lopinavir/ritonavir (Aluvia ®), IDV – Indinavir.