Table 1: Demographic and selected baseline characteristics of all Swiss HIV Cohort Study (SHCS) participants in the seven centres (data collection until 31/12/2019)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SHCS** | **Total** | **Basel** | **Bern** | **Geneva** | **Lausanne** | **St Gallen** | **Ticino** | **Zurich** |
| Patients ever registered (%) | 20 845 | 2214 (10.6) | 2696 (12.9) | 3079 (14.8) | 3307 (15.9) | 1243 (6.0) | 636 (3.1) | 7670 (36.8) |
| Female patients (%) | 5697 (27.3) | 683 (30.3) | 834 (30.3) | 915 (29.6) | 1081 (32.8) | 362 (29.5) | 210 (31.0) | 1612 (21.3) |
| **Ethnicity: number of patients (%)** | | | | | | | | |
| White | 14 127 (67.8) | 1402 (62.2) | 1628 (59.2) | 1413 (45.8) | 1732 (52.5) | 796 (64.9) | 519 (76.6) | 6637 (87.9) |
| Black | 2274 (10.9) | 270 (12.0) | 388 (14.1) | 500 (16.2) | 571 (17.3) | 116 (9.5) | 13 (1.9) | 416 (5.5) |
| Latin-American | 564 (2.71) | 51 (2.3) | 50 (1.8) | 104 (3.4) | 85 (2.6) | 21 (1.7) | 18 (2.7) | 564 (2.71) |
| Asian | 595 (2.9) | 94 (4.2) | 93 (3.38) | 58 (1.9) | 56 (1.7) | 31 (2.5) | 9 (1.3) | 254 (3.4) |
| Unknown | 3251 (15.6) | 434 (19.3) | 585 (21.3) | 1006 (32.6) | 849 (25.7) | 262 (21.4) | 113 (16.7) | 2 (0.0) |
| Other | 34 (0.2) | 3 (0.1) | 5 (0.2) | 6 (0.2) | 5 (0.2) | 0 (0.0) | 6 (0.9) | 9 (0.1) |
| **Number of patients under active follow-up** | | | | | | | | |
| Total (% of active patients) | 9816 (100) | 1179 (12.0) | 1357 (13.8) | 1248 (12.7) | 1556 (15.9) | 208 (7.6) | 330 (3.4) | 3501 (35.7) |
| Female patients (% of active patients) | 2726 (27.8) | 371 (31.5) | 428 (31.5) | 417 (33.4) | 541 (34.8) | 208 (32.3) | 98 (29.7) | 663 (18.9) |
| **Loss to follow-up** | | | | | | | | |
| Total (% of all patients) | 11 029 (52.9) | 1075 (47.7) | 1392 (50.6) | 1839 (59.6) | 1742 (52.8) | 581 (47.4) | 348 (51.3) | 4052 (53.7) |
| Died (% of loss to follow-up) | 5166 (46.8) | 437 (40.7) | 663 (47.6) | 865 (47.0) | 752 (43.2) | 346 (59.0) | 153 (44.0) | 1950 (48.1) |
| Did not respond to invitation (% of loss to follow-up) | 2337 (21.2) | 279 (26.0) | 243 (17.5) | 282 (15.3) | 302 (17.3) | 70 (12.1) | 56 (16.1) | 1105 (27.3) |
| Moved abroad (% of loss to follow-up) | 1332 (12.1) | 139 (12.9) | 135 (9.7) | 372 (20.2) | 213 (12.2) | 70 (12.1) | 47 (13.5) | 356 (8.8) |
| Other reason (% of loss to follow-up) | 2194 (19.9) | 220 (20.5) | 351 (25.2) | 320 (17.4) | 475 (27.3) | 95 (16.4) | 92 (26.4) | 641 (15.8) |
| **Most likely route of infection: number of patients (% of all patients)** | | | | | | | | |
| Homosexual contacts | 8169 (39.2) | 802 (35.6) | 867 (31.5) | 1147 (37.2) | 1085 (32.9) | 311 (25.4) | 197 (29.1) | 3760 (49.8) |
| Heterosexual contacts | 6881 (33.0) | 862 (38.2) | 1040 (37.8) | 1126 (36.5) | 1374 (41.7) | 476 (38.8) | 249 (36.7) | 1754 (23.2) |
| Intravenous drug use | 4834 (23.2) | 443 (19.7) | 680 (24.7) | 643 (20.8) | 693 (21.0) | 358 (29.2) | 208 (30.7) | 1818 (24.1) |
| Contaminated blood | 205 (1.0) | 14 (0.6) | 26 (1.0) | 51 (1.7) | 34 (1.0) | 15 (1.2) | 5 (0.7) | 60 (0.8) |
| Perinatally contaminated | 118 (0.6) | 17 (0.8) | 16 (0.6) | 26 (0.8) | 26 (.8) | 9 (0.7) | 2 (0.3) | 22 (0.3) |
| Unknown/other | 629 (3.02) | 116 (5.2) | 120 (4.4) | 94 (3.1) | 86 (2.6) | 57 (4.7) | 17 (2.5) | 139 (1.8) |
| **Age at HIV diagnosis (year)** | | | | | | | | |
| Mean (median) | 33.9 (32.0) | 34.5 (32.0) | 34.0 (31.0) | 33.4 (31.0) | 33.4 (31.0) | 33.9 (31.0) | 33.5 (30.0) | 34.1 (32.0) |
| IQR | [26-40] | [26-41] | [26-40] | [26-39] | [26-39] | [25-40] | [25-39] | [26-40] |
| Treatment: number of patients (% of all patients) | 17 677 (84.8) | 1972 (87.5) | 2348 (85.4) | 2549 (82.6) | 2779 (84.3) | 1048 (85.5) | 572 (84.4) | 6409 (84.9) |
| Naïve | 3168 (15.2) | 282 (12.5) | 401 (14.6) | 538 (17.4) | 519 (15.7) | 178 (14.5) | 106 (15.6) | 1144 (15.1) |
| ART | 2601 (12.5) | 226 (10.0) | 269 (9.8) | 481 (15.6) | 464 (14.1) | 127 (10.4) | 41 (6.1) | 993 (13.2) |
| cART | 15 076 (72.3) | 1746 (77.5) | 2079 (75.6) | 2068 (67.0) | 2315 (70.2) | 921 (75.1) | 531 (78.3) | 5416 (71.7) |
| **Age when cART started: years** | | | | | | | | |
| Mean (median) | 38.7 (37.0) | 39.4 (38.0) | 38.8 (37.0) | 38.5 (37.0) | 38.1 (37.0) | 39.0 (38.0) | 39.0 (37.0) | 38.6 (37.0) |
| IQR | [31.0-45.0] | [32.0-46.0] | [31.0-45.0] | [31.0-44.0] | [31.0-44.0] | [31.0-45.0] | [32.0-44.0] | [31.0-44.0] |
| **Time between HIV diagnosis and cART: years** | | | | | | | | |
| Mean (median) | 4.1 (1.8) | 4.3 (1.5) | 4.0 (1.7) | 4.9 (2.9) | 4.1 (1.6) | 3.8 (1.3) | 4.7 (2.5) | 3.9 (1.7) |
| IQR | [0.1-6.9] | [0.1-7.1] | [0.1-6.3] | [0.2-8.4] | [0.1-6.7] | [0.1-6.0] | [0.2-8.7] | [0.1-6.5] |
| CD4 cell count at start of ART (cell count/µl) | | | | | | | | |
| Mean (median) | 269.3 (234.0) | 290.6 (251.0) | 258.0 (219.0) | 275.3 (236.0) | 291.9 (258.0) | 273.0 (230.0) | 293.1 (270.0) | 252.8 (220.0) |
| IQR | [109.0-367.0] | [117.0-397.0] | [101.0-347.0] | [117.0-375.0] | [127.0-393.0] | [100.0-380.0] | [130.0-396.0] | [100.0-350.0] |
| **HIV related diseases (% of all patients)** | | | | | | | | |
| Patients with B-events | 4,221 (20.3) | 544 (24.1) | 575 (20.9) | 543 (17.6) | 694 (21.0) | 496 (40.5) | 179 (26.4) | 1,420 (18.8) |
| Patients with C-events | 7,086 (34.0) | 775 (34.4) | 902 (32.8) | 1,150 (37.3) | 1,074 (32.6) | 266 (21.7) | 214 (31.6) | 2,507 (33.2) |
| **Type of health care provider at registration (% of all patients)** | | | | | | | | |
| Cohort center | 9438 (45.3) | 1088 (48.3) | 1368 (49.8) | 1159 (37.5) | 1438 (43.6) | 670 (54.7) | 345 (50.9) | 3370 (44.6) |
| Other outpatient clinic or hospital | 1271 (6.1) | 416 (18.5) | 387 (14.1) | 20 (0.7) | 52 (1.6) | 93 (7.6) | 116 (17.1) | 187 (2.5) |
| Private physician | 2779 (13.3) | 143 (6.3) | 148 (5.4) | 513 (16.6) | 627 (19.0) | 19 (1.6) | 19 (2.8) | 1310 (17.3) |
| Unknown/missing | 7357 (35.3) | 607 (26.9) | 846 (30.8) | 1395 (45.2) | 1181 (35.8) | 444 (36.2) | 198 (29.2) | 2686 (35.6) |

Abbreviations: Naïve, individuals never treated with antiretroviral therapy (ART); cART, combined antiretroviral treatment; B-event and C-event, HIV disease progression classified as category B and C based on the classification system of the Centers for Disease Control and Prevention (CDC).

Table 2: Number of active patients in the Swiss HIV Cohort Study (SHCS) seen in the respective calendar year

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **1989** | **1999** | **2009** | **2019** |
| **All (%)** | 2108 (100) | 4844 (100) | 7860 (100) | 9771 (100) |
| Male | 1552 (73.6) | 3380 (69.8) | 5497 (69.9) | 7072 (71.2) |
| Female | 556 (26.4) | 1464 (30.2) | 2363 (30.1) | 2699 (27.6) |
| **Ethnicity (%)** | | | | |
| White | 1125 (53.4) | 4091 (84.5) | 6315 (80.3) | 7497 (76.7) |
| Black | 5 (0.2) | 359 (7.4) | 1022 (13.0) | 1434 (14.7) |
| Latin-American | 4 (0.2) | 72 (1.5) | 204 (2.6) | 384 (3.9) |
| Asian | 7 (0.3) | 104 (2.2) | 297 (3.8) | 423 (4.3) |
| Other | 1 (0.1) | 14 (0.3) | 20 (0.3) | 18 (0.2) |
| Unknown | 966 (45.8) | 204 (4.2) | 2 (0.0) | 15 (0.2) |
| **Most likely route of infection: (%)** | | | | |
| Homosexual contacts | 703 (33.4) | 1685 (34.8) | 3216 (40.9) | 4572 (46.8) |
| Heterosexual contacts | 385 (18.3) | 1590 (32.8) | 3054 (38.9) | 3702 (37.9) |
| Intravenous drug use | 966 (45.8) | 1395 (28.9) | 1248 (15.9) | 966 (9.9) |
| Unknown/others | 54 (2.6) | 174 (3.6) | 342 (4.4) | 531 (5.4) |
| **Age in years median [IQR]** | 31 [27-0]36 | 38 [33-44] | 45 [39-51] | 52 [43-58] |
| **On ART treatment (%)** | 283 (13.4) | 3596 (74.2) | 6559 (83.5) | 9462 (96.8) |
| **VL <400 cps/ml**  **(%)** | Not available | 2762 (57.0) | 6538 (83.2) | 9501 (97.2) |
| **VL <50 cps/ml**  **(%)** | Not available | Not available | 6008 (76.4) | 9214 (94.3%) |
| **Median CD4 cell count at baseline –CD4 Nadir [IQR]** | 180 [80-305.5] | 237 [117-359] | 250 [130-365] | 276 [151-421.5] |
| **Patients with AIDS (CDC stage C)** | 361 (24.3) | 1148 (24.5) | 1838 (23.7) | 2045 (21.1) |
| **BMI kg/m2**  **median [IQR]** | Not available | 22.4 [20.5-24.6] | 23.4 [21.1-25.9] | 24.8 [22.3-27.8] |

Abbreviations: ART, antiretroviral treatment; VL, HIV-1 RNA viral load; BMI, body mass index