Supplemental Digital Content 1

Susceptibility ratings and scores used to define subgroups based on OBT.

**Initial OBT**

For each ARV in the OBT

- **Fully-active ARV (FAA) per study eligibility criteria**
  - Susceptibility
    - No evidence of resistance by screening susceptibility assays or historical measures
  - Availability, ie, participant is
    - Tolerant to
    - Eligible for
    - Willing to take

  - FAA = 0 or FAA = 1

  - Sum of FAA for all ARVs in OBT

  - #FAA

- **Susceptibility rating (SR)**
  - Monogram screening susceptibility assays
    - PhenoSense GT Plus Integrase (PIs, NRTIs, NNRTIs, INIs)
      - SR = 1 (sensitive), 0.5 (partially sensitive), 0 (resistant)
    - PhenoSense Entry assay (enfuvirtide)
      - SR = 1 (susceptible), 0 (reduced susceptibility)
    - Trofile assay (maraviroc)
      - SR = 1 (CCR5 antagonist activity “YES”), 0 (activity “NO”)

  - Stanford HIVdb Integrated Genotypic Resistance Interpretation System applied to sequences from screening genotypic assays
    - SR = 0, 0.25, 0.5, 0.75, or 1

  - Individual ARVs in OBT
  - Sum of SRs for all ARVs in OBT
  - Sum of SRs for NEW ARVs in OBT

- **ARV, antiretroviral; FAA, fully-active ARVs according to study entry criteria; #FAA, number of FAAs; G, genotypic; INI, integrase inhibitor; NNRTI, non-nucleoside reverse transcriptase inhibitor; NRTI, nucleoside reverse transcriptase inhibitor; O, overall; OBT, optimized background therapy; P, phenotypic; PI, protease inhibitor; S, Stanford; SR, susceptibility rating; SS, susceptibility score. aFor enfuvirtide only (twice-daily injectable). b0 for high-level resistance, 0.25 for intermediate resistance, 0.5 for low-level resistance, 0.75 for potential low-level resistance, or 1 for full susceptibility. cNew ARV agents are those which have never been previously taken by the participant.**