

## Characteristics of women living with HIV in the RESPOND cohort

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### Background:

Women remain under-represented in HIV research and there is a need for more sex-stratified analyses on comorbidities and ageing. We describe women with HIV in the RESPOND consortium, a large multinational observational cohort of people living with HIV.

### Methods:

Characteristics of RESPOND women were compared to men and presented at baseline: the date of starting an integrase inhibitor (INSTI) after 01-Jan-2012, or for those who did not start an INSTI, the latest of 01-Jan-2012 or enrolment into local cohort. Viral load (VL), CD4, antiretroviral (ART) regimens and burden of comorbidity were presented at first ART initiation  $\geq$ 01-Jan-2012.

### Results:

Of 33, 087 enrolled, 25% were women; 59.5% white, 25.4% black. Median age was 43-years for women, 46-years for men. Prior AIDS diagnosis was reported in 20.6% of women, 19.9% of men; Hepatitis C and B co-infection in 23.9% and 20.0% of women; 5.9% and 7.5% of men; current smoking in 18.6% and 24.9% respectively. At baseline, 51.0% [CI:50.0, 52.1] of women and 61.4% [CI:60.8, 62.0] of men had dyslipidaemia; hypertension: 27.9% [CI:27.4, 29.4], 35.5% [CI:35.7, 36.9], respectively.

23.9% of women and 31.5% of men initiated first ART  $\geq$ 01-Jan-2012; at initiation women

- were less likely to initiate INSTI ( $P < 0.001$ ), more likely to initiate PI ( $P < 0.001$ ), rates of NNRTI were comparable ( $P = 0.45$ ).

- had a lower proportion with high VL (at 100,000 copies/mL) at all ages, a higher proportion with CD4<350 cells/ $\mu$ L and lower median CD4 cell count at all age-groups except for 55+ years.
- had a lower proportion with  $\geq 1$  comorbidity ( $P<0.001$ ) except among those aged 55+ years.

### **Conclusion:**

RESPOND women were more likely to be black, less likely to smoke and were more treatment experienced at baseline, they differed in terms of ART regimen initiated, CD4 and viral load at first ART. Further investigation of sex differences in RESPOND is required.

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