PREDICTORS OF ANTIRETROVIRAL THERAPY (ART) COMMENCEMENT WITHIN SIX MONTHS OF DIAGNOSIS AMONG PEOPLE NEWLY DIAGNOSED WITH HIV IN NSW

<u>Telfer B</u>¹, Selvey C¹, Bowden V¹, Charman M¹, Darnell J¹, Clarke K¹, Sheppeard V¹, McAnulty J¹, McGregor S², Jin F² and Grulich A²

¹Health Protection New South Wales, ²The Kirby Institute.

Background: Early commencement of ART is a key objective of the NSW HIV Strategy. From 2013, HIV surveillance ascertained time to ART initiation. Surveillance information is sought from treating doctors six months after diagnosis. We conducted a retrospective cohort study using surveillance data to identify patient characteristics associated with early commencement of ART.

Methods: Univariate and multivariate logistic regression analyses were used to compare characteristics of NSW residents newly diagnosed with HIV in 2013-2015 who commenced ART within six months of diagnosis with those who did not. Potential explanatory characteristics were year of, and age at diagnosis, gender, Aboriginal person status, country of birth, primary language, area of residence, HIV risk exposure, CD4 count and viral load at diagnosis, and care outcome.

Results: Of 1045 of new diagnoses 973 (93%) were followed up, and 716 (74%) commenced ART within six months of diagnosis. In multivariable analysis, factors positively associated with early ART were: diagnosis in 2015 (adjusted odds ratio [AOR] 5.59, 95% confidence interval [CI] 3.39-9.21; p value <.0001) and 2014 (AOR 1.65, CI 1.09-2.50; p=0.02) versus 2013, being male (AOR 2.20, CI 1.12-4.32; p=0.02), primary language being English (AOR 2.29, CI 1.41-3.72; p=0.0008) versus another language, residing in outer metro Sydney (AOR 1.81, CI 1.18-2.80; p=0.007) versus inner metro Sydney, CD4 count of 0-199 (AOR 15.35, CI 6.42-36.68; p<.0001), 200-349 (AOR 5.58, CI 3.12-9.99; p<.0001), 350-499 (AOR 2.13, CI 1.35-3.35; p=0.001) versus 500 or over, VL of 10,000-99,9999 (AOR 2.17, CI 1.36-3.44; p=0.001), 100,000 or over (AOR 2.51, CI 1.5-4.19; p=0.0005) versus 0-9,999, and retention in care (AOR 17.15, CI 8.45-34.79; p=<.0001).

Conclusion: The temporal increase in early ART demonstrates progress in clinical practice. Our findings suggest that in NSW more work is needed to achieve early ART among women, people of culturally and linguistically diverse backgrounds, and people in inner metro Sydney.

Disclosure of Interest Statement: none