



# Hospitalisations Over a Year Follow-up in a Cohort of Adults living with HIV with Sustained Viral Suppression in Australia

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# Disclosures

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# Background

- People living with HIV (PLWH) successfully treated with ART develop few AIDS-defining events, are successfully ageing and living longer
- Hospitalisations:
  - Men living with HIV in Australia have 45% higher hospital admission rate than the general male population<sup>1</sup>
  - In the era of contemporary ART, reasons / risk for hospitalisation of PLWH in Australia are unknown
- Aim:
  - Determine the reasons & risk for hospitalisation over 12 months of follow-up in a cohort of PLWH in Australia

<sup>1</sup> Moore CL et al. HIV Med. 2016;17(5):327-39.

# Methods

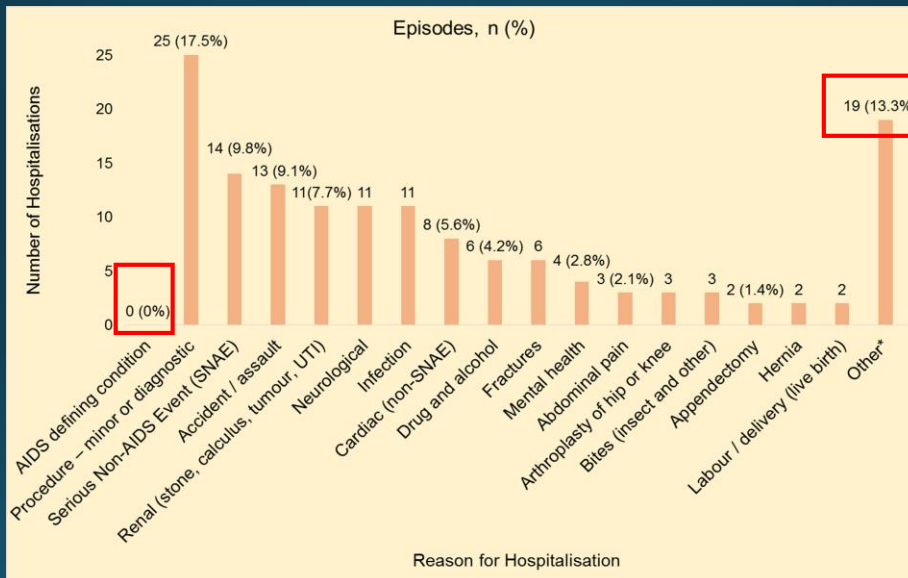
## PAART study

- 522 participants at 17 Australian GP, sexual health and hospital sites
- Eligibility
  - HIV+ adult  $\geq 18$  years of age
  - on stable ART for previous 3 months (minimum)
  - plasma HIV-RNA  $< 50$  copies / mL
- Assessments
  - 90-item participant survey
  - neurocognitive function: Cogstate
  - pharmacy ART dispensing data
  - clinical and virological data
  - hospitalisations over 12 months were recorded

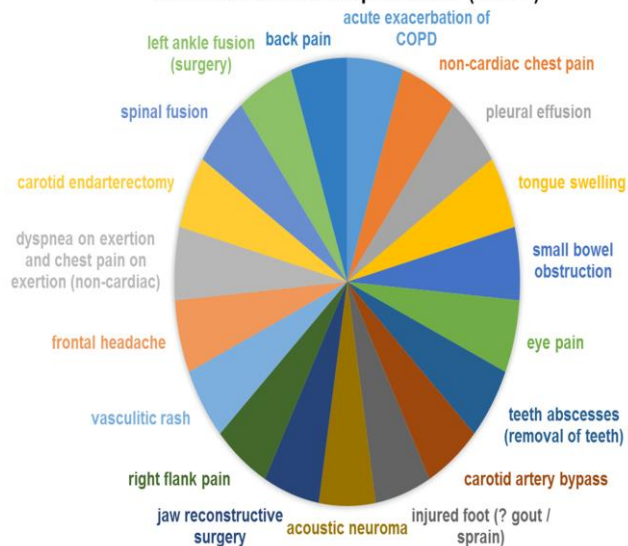
# Results

- Participants
  - 94% male
  - age = 51 years
  - HIV duration = 12 years
  - ART duration = 11 years
  - HIV RNA  $< 50$  copies/mL = 3.3 years
- Hospitalisations
  - 94 (18.0%) participants hospitalised in the first 12 months of follow-up
  - 143 hospitalisations
  - 1 hospitalisation resulted in death

# Hospitalisations



## Other Reasons for Hospitalisation (all n=1)



# Cox proportional hazards regression model

- 28 baseline variables associated ( $p < 0.05$ ) with hospitalisation over the following 12 months including:
  - age; depression; drug use; polypharmacy of concomitant medications; efavirenz or protease inhibitor in ART regimen; and ART not co-formulated in STR
- The only variable significant in multivariable Cox regression was **having started ART to prevent HIV disease progression** (adjusted hazards ratio 0.6 [0.4-0.9]  $p = 0.029$ )

## Summary & Conclusions

- In this sample:
  - Hospitalisations were common over 12 months
  - Most commonly procedures / Serious non-AIDS events (SNAEs)
  - Preventable reasons included accidents, renal issues, and infection
  - Hospitalisations were largely not predictable, the only significant variable being starting ART to prevent HIV progression – potentially a surrogate for early HIV
  - Further analyses of 24-month data required

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