



Adherence to statins and medications for
cardiovascular disease in patients living with HIV
by LC-MS urine analysis

Joshua Nazareth, Ayobami Adebayo, Fahad Muhammad, Hanfa Karim, Daniel Pan, Christopher A. Martin, Iain Stephenson,
Jatinder S. Minhas, Pankaj Gupta, Manish Pareek

University Hospitals of Leicester NHS Trust
University of Leicester



Conflict of Interest

In relation to this presentation, I declare that I have no conflict of interest

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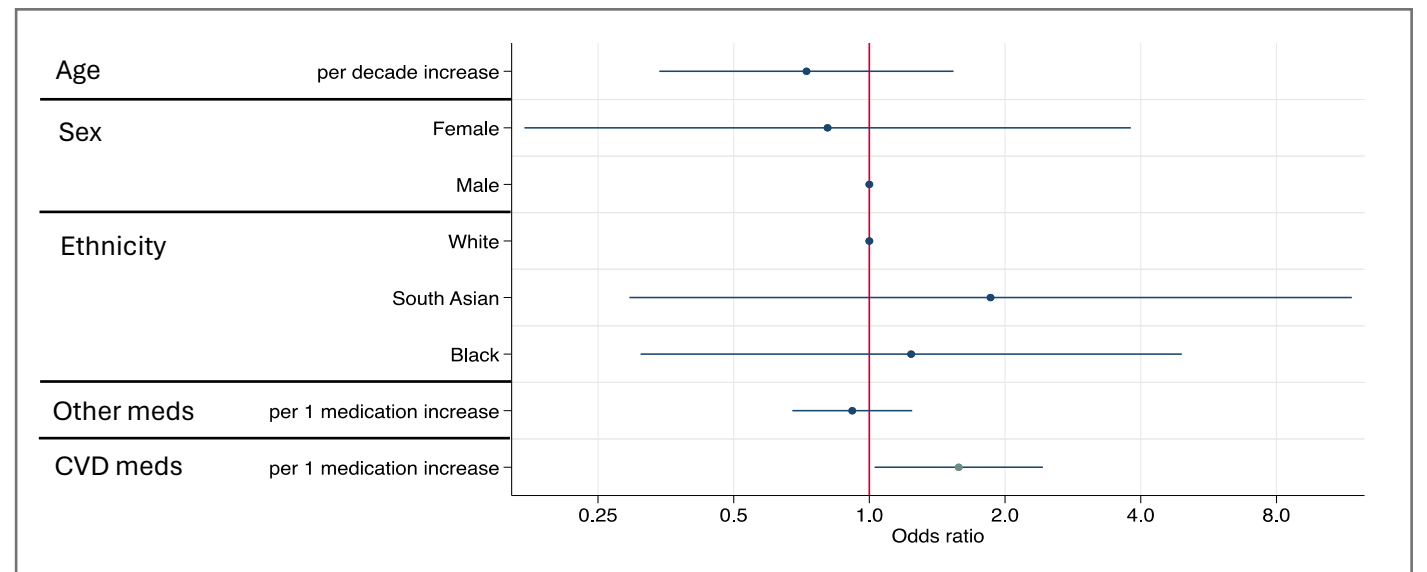
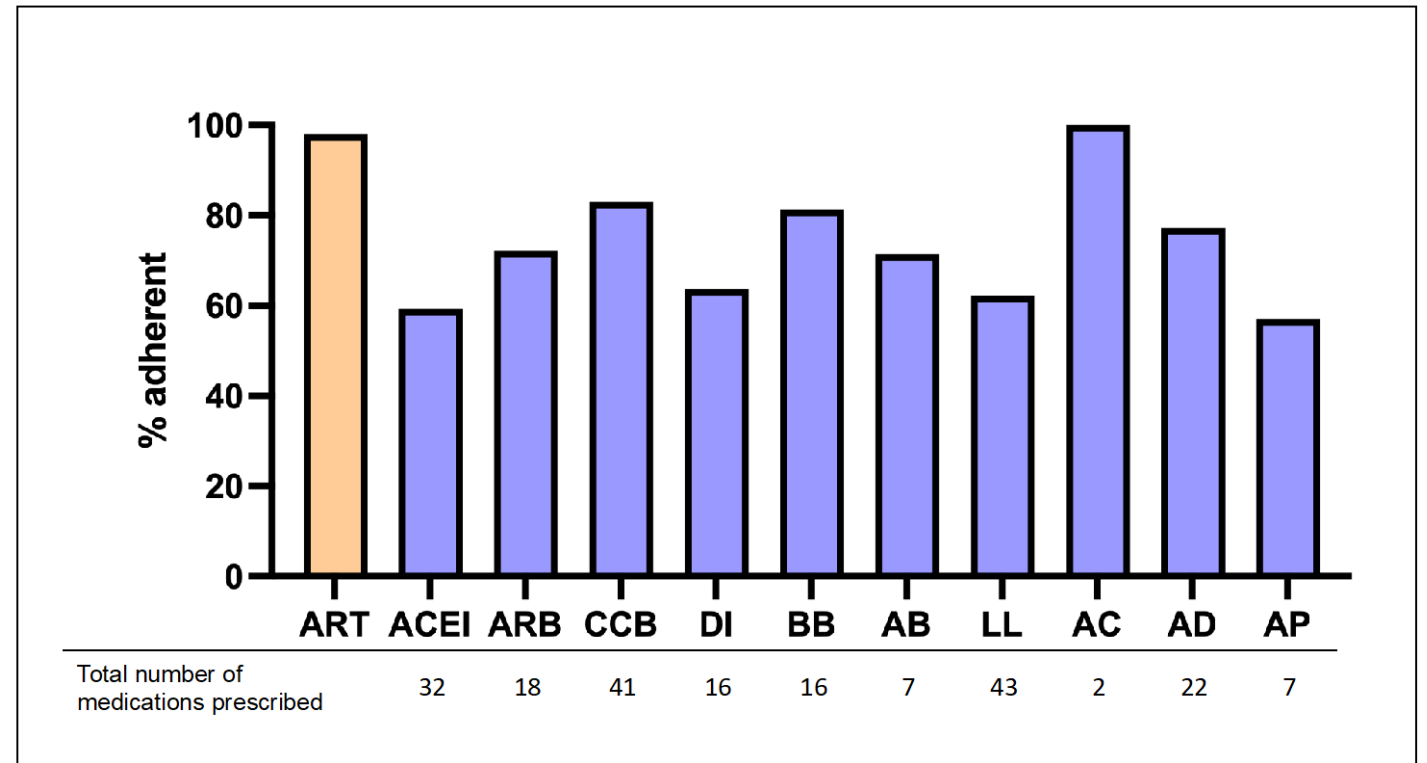
HIV, cardiovascular disease & drug adherence

- PLWH are aging & becoming increasingly multimorbid
- Vast majority virally suppressed requiring adherence to ARVs
- But what about adherence to cardiovascular medications?
- Cross-sectional study at the University Hospitals of Leicester NHS Trust between 16/04/2019 to 08/11/2019 using LC-MS on urine samples
- We recruited 100 consecutive PLWH

ACEi	ARB	CCB	Diuretic	β blocker	α blocker	Lipid	Anticoag	AntiDM	AntiPlt
Lisinopril	Candesartan	Amlodipine	Bendroflumethiazide	Bisoprolol	Doxazosin	Atorvastatin	Warfarin	Empagliflozin	Clopidogrel
Ramipril	Irbesartan	Lacidipine	Spirolactone	Propranolol	Terazosin	Rosuvastatin	Rivaroxaban	Linagliptin	
	Losartan	Nifedipine	Indapamide			Ezetimibe		Metformin	
			Furosemide					Gliclazide	
			Hydrochlorothiazide						

Adherence study results

	Total n=99
Median age (IQR)	54 (49-60)
Sex	
Male	63
Female	36
Ethnicity	
White	33
Black	53
South Asian	10
Other / Mixed	3
Country of birth	
UK	29
Non-UK	49
Years with HIV (IQR)	15 (11-19)
BMI (IQR)	29.5 (26-33)
Smoking status	
Current	17
Ex-smoker	26
Never	56
Systolic BP (IQR)	142 (130-154)
HbA1C (IQR)	5.8 (5.4-6.2)
LDL Cholesterol (IQR)	2.4 (2.0-3.1)
Number of other meds (s.d)	2.7 (2.0)
Number of cardiovascular meds (s.d)	2.1 (1.2)
Detectable HIV Viral load	2



Conclusions

- Poor adherence to statins and other cardiovascular meds
- Similar rates in other cohorts eg. HF, TIA
- The reasons for non-adherence are complex and multi-faceted
- How can we maximise the clinical benefit?

