

# The long-term relationship between cannabis and heroin use: An 18-20-year follow-up of the Australian Treatment Outcome Study

Jack Wilson PhD

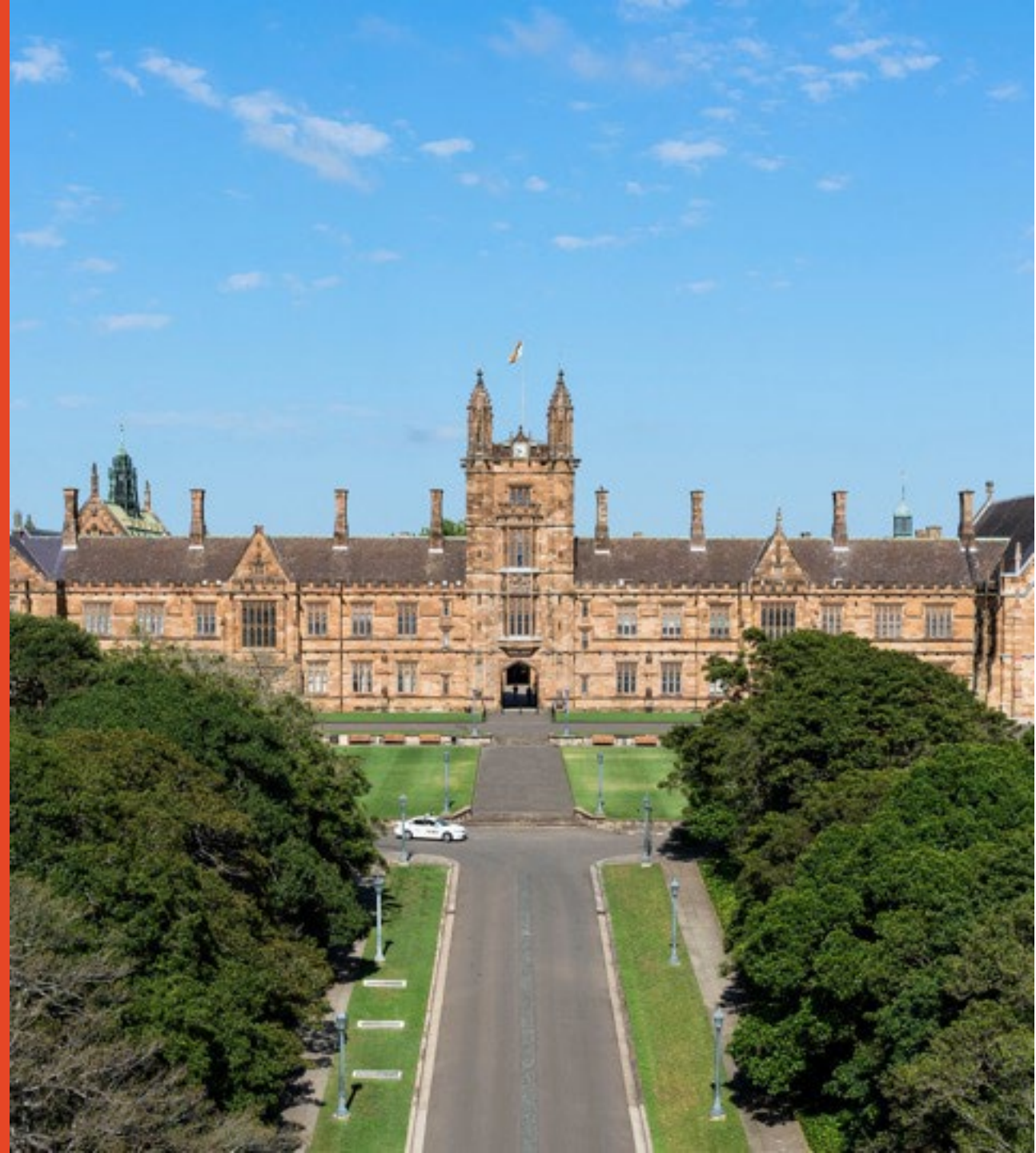
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No disclosures to declare



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# Why cannabis use?

- Opioid and cannabis use frequently co-occurring use<sup>1</sup>
- Change in cannabis policies making it more accessible
- Recognition of cannabis as a substitute for opioid use or method of harm reduction<sup>2,3</sup>

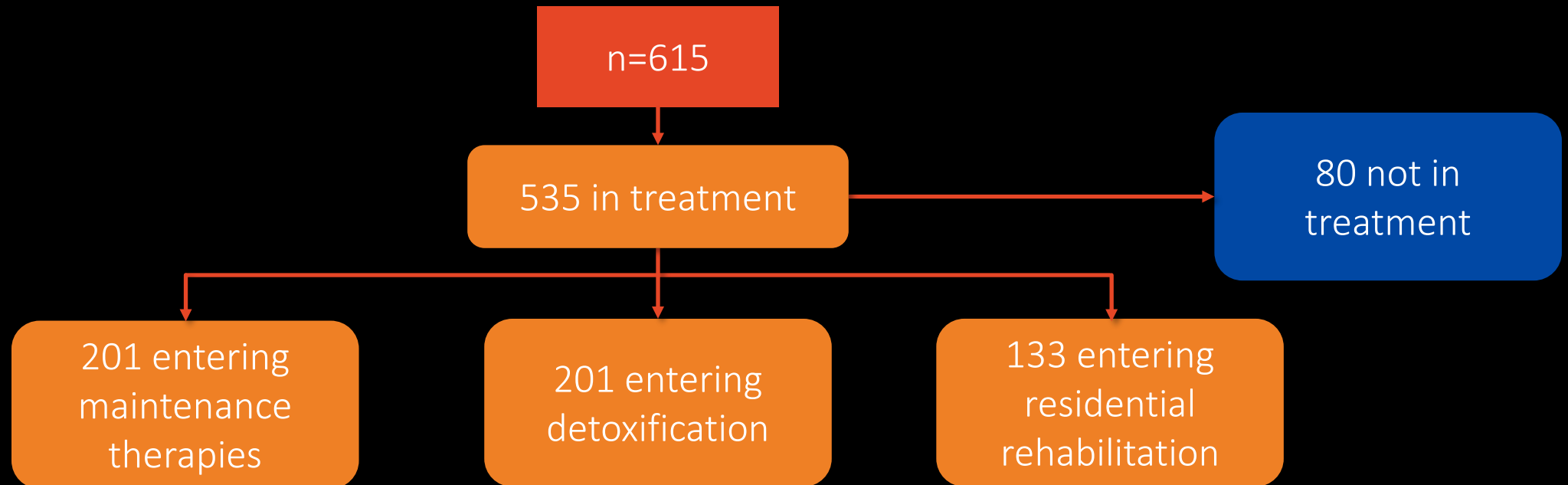
1. Santo, T., Jr, Gisev, N., Campbell, G., Colledge-Friday, S., Wilson, J., Tran, L. T., Lynch, M., Martino-Burke, D., Taylor, S., & Degenhardt, L. (2024). Prevalence of comorbid substance use disorders among people with opioid use disorder: A systematic review & meta-analysis. *The International journal on drug policy*, 128, 104434. Advance online publication. <https://doi.org/10.1016/j.drugpo.2024.104434>
2. Bachhuber, M. A., Saloner, B., Cunningham, C. O., & Barry, C. L. (2014). Medical cannabis laws and opioid analgesic overdose mortality in the United States, 1999-2010. *JAMA Intern Med*, 174(10), 1668-1673. <https://doi.org/10.1001/jamainternmed.2014.4005>
3. Gorfinkel, L. R., Stohl, M., Greenstein, E., Aharonovich, E., Olfson, M., & Hasin, D. (2021). Is Cannabis being used as a substitute for non-medical opioids by adults with problem substance use in the United States? A within-person analysis. *Addiction*, 116(5), 1113-1121. <https://doi.org/https://doi.org/10.1111/add.15228>

# Limitations and aims

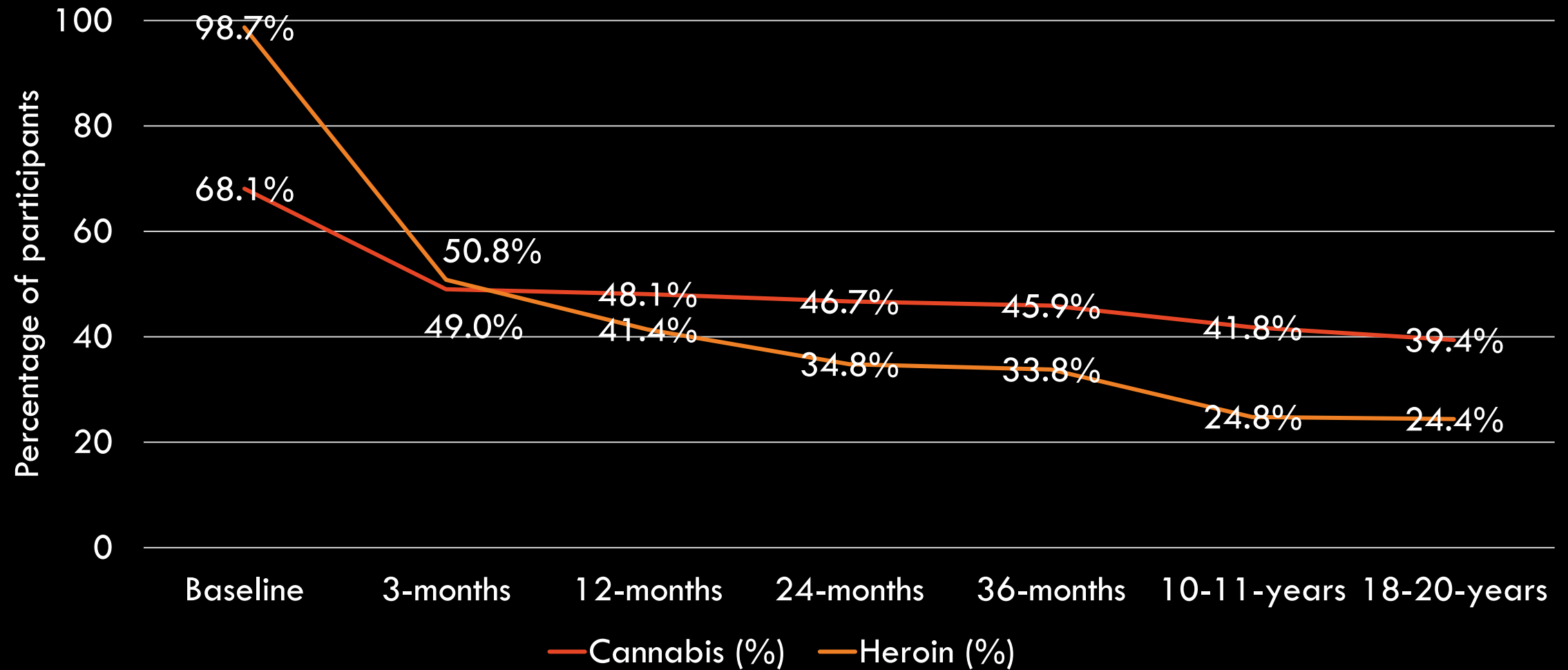
- Very few studies extend beyond a few years with limited follow-ups
- Overlook reciprocal associations
- Aim to examine a within-person reciprocal relationship between cannabis and heroin use at several follow-ups over 18-20-years

# The Australian Treatment Outcome Study (ATOS)

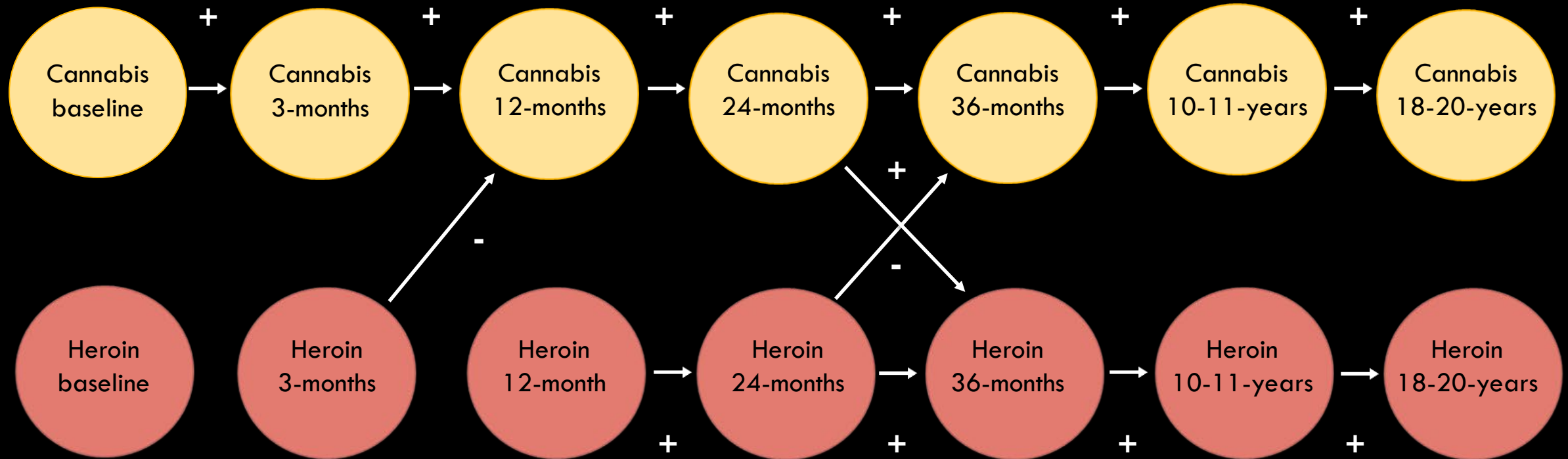
- Prospective longitudinal cohort study
- Baseline data collected 2001-02
- One of the few studies focusing on heroin dependence alone



# Prevalence of cannabis and heroin use



# Random Intercept cross-lagged panel model (RI-CLPM)



Wilson, J., Mills, K. L., Sunderland, M., Freeman, T. P., Teesson, M., Haber, P., & Marel, C. (2024). The Long-Term Relationship Between Cannabis and Heroin Use: An 18- to 20-year Follow-Up of the Australian Treatment Outcome Study (ATOS). *American Journal of Psychiatry*, 181(2), 135-143. <https://doi.org/10.1176/appi.ajp.20230088>

# Conclusions

- Cannabis use remains common among those with OUDs throughout the life-course
- No evidence to suggest that cannabis use was consistently associated with heroin use
- Clinicians and policymakers should be cautious when advocating for the benefits of cannabis use among those with opioid use disorder