



Kirby Institute



Comparing adherence to once-daily and twice-daily DAA therapy among people with recent injecting drug use or current opioid substitution therapy: the SIMPLIFY and D3FEAT studies

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# Disclosures

Nothing to disclose

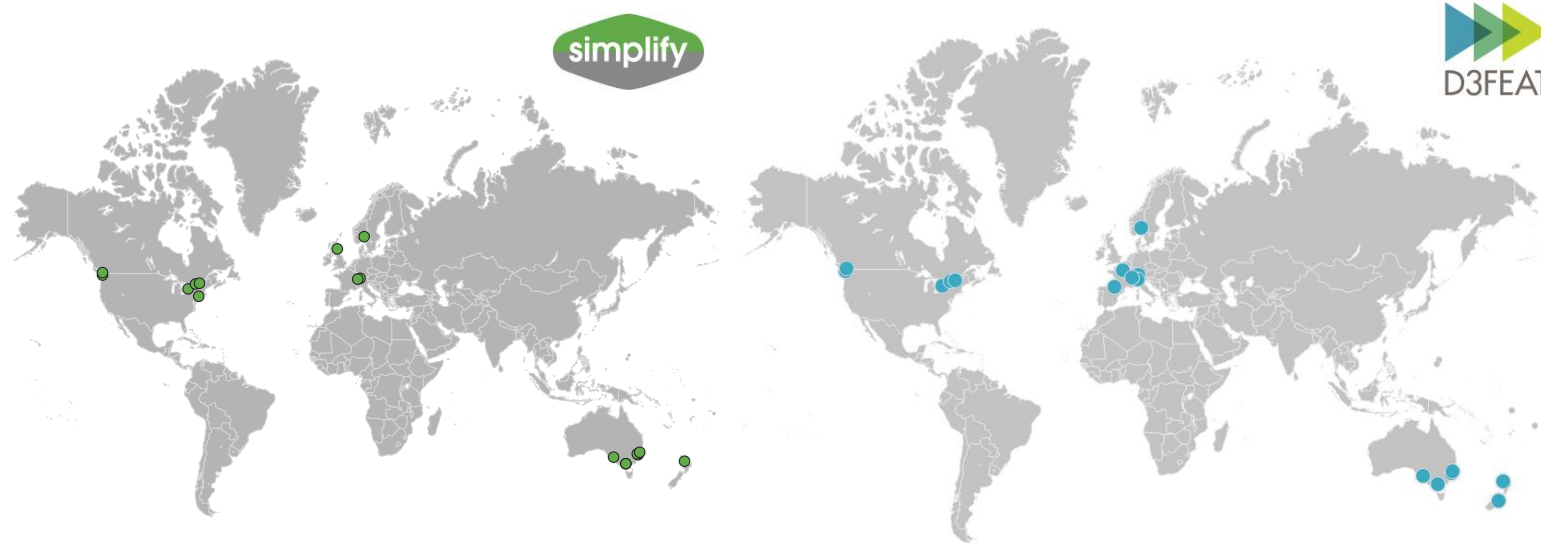
# Background and aims

## Adherence to therapy has been a concern regarding scale up in people who inject drugs

1. Investigate adherence to HCV DAA therapy and associated factors among people with recent injection drug use
2. Investigate the change in adherence over the course of treatment
3. Compare the adherence to once-daily therapy to twice-daily therapy

# Methods

- International open-label trials of HCV DAA treatment at 25 sites in 8 countries
- Treated with sofosbuvir and velpatasvir (SIMPLIFY; n=103) or PrOD±RBV (D3FEAT; n=87)
- People with recent injecting drug use (past six months; SIMPLIFY) or people with recent injecting drug use or currently on OST (D3FEAT)



# Adherence assessment

- Measured using an electronic blister-pack
  - Administered weekly
- Calculated as the number of doses removed from the blister-pack divided by the number of expected doses.



## Non-adherence

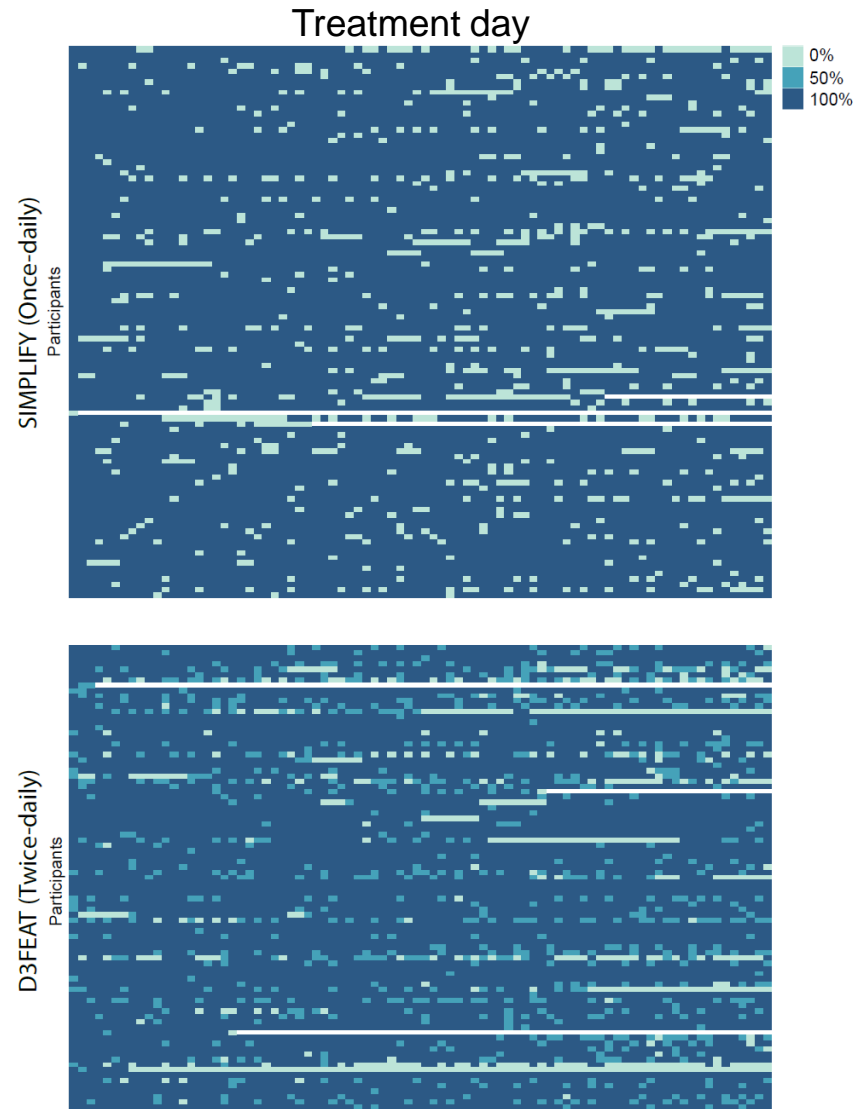
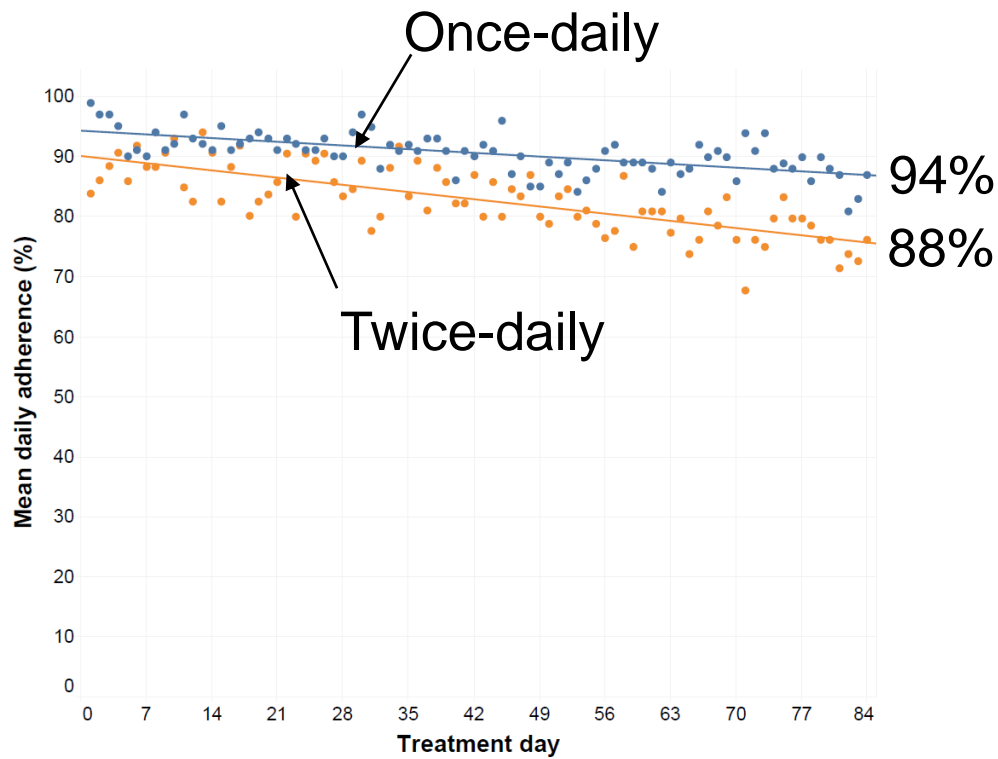
- Adherent on <90% of days

# Characteristics

	<b>Overall (n=190)</b>
<b>Age, median (IQR)</b>	48 (41-53)
<b>Male sex</b>	141 (74)
<b>Unstable housing</b>	37 (20)
<b>Hazardous alcohol consumption</b>	97 (51)
<b>Any injecting drug use in the last month</b>	115 (61)
<b>Heroin</b>	83 (44)
<b>Cocaine</b>	23 (12)
<b>Amphetamines</b>	46 (24)
<b>≥daily injecting drug use</b>	40 (21)
<b>OAT and recent injecting (past month)</b>	
<b>No OAT, no recent injecting</b>	21 (11)
<b>No OAT, recent injecting</b>	47 (25)
<b>OAT, no recent injecting</b>	52 (28)
<b>OAT, recent injecting</b>	68 (36)

# Adherence

Overall adherence of 92%



# Factors associated with non-adherence

## Unstable housing

- aOR 2.18 (95% CI, 1.01-4.07)

## Stimulant injecting (last month)

- aOR 2.48 (95% CI, 1.28-4.82)

## Twice daily therapy

- aOR 2.81 (95% CI, 1.47-5.36)

**SVR was not significantly lower among non-adherent participants (89% vs. 95%;  $P=0.174$ )**



# Discussion

- Despite risk factors for non-adherence (stimulant injecting, unstable housing) adherence was high.
- Lower adherence to twice-daily therapy
- Adherence declines over the course of treatment
- SVR was not significantly affected by treatment adherence

# Acknowledgements



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SYDNEY



Kirby Institute



CanHepC

Canadian Network on Hepatitis C  
Réseau Canadien sur l'Hépatite C

## SIMPLIFY study participants

Study coordination staff: Amanda, Ecaterina, Mahshid, Sophie, Pip



abbvie



## SIMPLIFY study group

**Protocol Steering Committee** – Gregory Dore (Chair, UNSW Sydney, Sydney, Australia), Philip Bruggmann (Arud Centres for Addiction Medicine, Zurich, Switzerland), Jason Grebely (UNSW Sydney, Sydney, Australia), Philippa Marks (UNSW Sydney, Sydney, Australia), Julie Bruneau (Centre Hospitalier de l'Université de Montréal, Canada), Tracy Swan (Médecins Sans Frontières, New York, United States), Olav Dalgard (Akershus University Hospital, Oslo, Norway), Jude Byrne (Australian Injecting & Illicit Drug Users League), Melanie Lacalamita (Poliklinik für Infektiologie, Inselspital, Bern, Switzerland) and Adrian Dunlop (Newcastle Pharmacotherapy Service, Newcastle, Australia).

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